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<110> Baker, Kevin P.
Beresini, Maureen
DeForge, Laura
Desnoyers, Luc
Filvaroff, Ellen
Gao, Wei-Qiang
Gerritsen, Mary E.
Goddard, Audrey
Godowski, Paul J.
Gurney, Austin L.
Sherwood, Steven
Smith, Victoria
Stewart, Timothy A.
Tumas, Daniel
Watanabe, Colin K
Wood, William
Zhang

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ACIDS ENCODING THE SAME

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<160> 550

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<211> 1264

<212> DNA

<213> Homo Sapien

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<213> Homo Sapien

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Tyr Arg Thr Asp Lys Tyr Lys Arg Leu Lys Ala Glu Val Glu Lys
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Gln Ser Lys Lys Leu Glu Lys Lys Lys Glu Thr Ile Thr Glu Ser
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Ala Gly Arg Gln Gln Lys Lys Lys Ile Glu Arg Gln Glu Glu Lys
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Leu Lys Asn Asn Asn Arg Asp Leu Ser Met Val Arg Met Lys Ser
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Met Phe Ala Ile Gly Phe Cys Phe Thr Ala Leu Met Gly Met Phe
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Asn Ser Ile Phe Asp Gly Arg Val Val Ala Lys Leu Pro Phe Thr
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Pro Leu Ser Tyr Ile Gln Gly Leu Ser His Arg Asn Leu Leu Gly
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Asp Asp Thr Thr Asp Cys Ser Phe Ile Phe Leu Tyr Ile Leu Cys
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Thr Met Ser Ile Arg Gln Asn Ile Gln Lys Ile Leu Gly Leu Ala
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<213> Homo Sapien

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atggcaattt tgctgactgt ggaagtgact catccaaact ccatgccagc 300

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Asn Ile Gln Tyr Glu Val Ile Gly Asn Tyr Tyr Ser Ser Glu Arg
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Met Ala Asp Asn Ala Cys Val Leu Phe Ala Val Ser Val Leu Met
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Phe Ile Ile Ser Ser Met Leu Val Tyr Gly Ala Ile Ser Tyr Gln
95 100 105

Val Gly Trp Leu Ile Pro Phe Phe Cys Tyr Arg Leu Phe Asp Phe
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Val Leu Ser Cys Leu Val Ala Ile Ser Ser Leu Thr Tyr Leu Pro
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Arg Ile Lys Glu Tyr Leu Asp Gln Leu Pro Asp Phe Pro Tyr Lys
140 145 150

Asp Asp Leu Leu Ala Leu Asp Ser Ser Cys Leu Leu Phe Ile Val
155 160 165

Leu Val Phe Phe Ala Leu Phe Ile Ile Phe Lys Ala Tyr Leu Ile
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Asn Cys Val Trp Asn Cys Tyr Lys Tyr Ile Asn Asn Arg Asn Val
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Arg Phe Ala Asn Leu
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<212> PRT

<213> Homo Sapien

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Ser	Glu	Asn	Thr	Phe	Cys	Ser	Gly	Asp	His	Val	Ser	Trp	His	Ser	
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Pro	Leu	Asp	Asn	Ser	Glu	Ser	Arg	Ile	Gln	His	Met	Leu	Leu	Thr	
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Glu	Asp	Pro	Gln	Met	Gln	Pro	Val	Gln	Thr	Pro	Phe	Gly	Val	Val	
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Thr	Phe	Leu	Gln	Ile	Val	Gly	Val	Cys	Thr	Glu	Glu	Leu	His	Ser	
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Val	Pro	Ile	Ala	Gly	Gly	Pro	Trp	Leu	Ile	Thr	Asp	Met	Arg	Arg	
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Gly	Glu	Thr	Ile	Phe	Glu	Ile	Asp	Pro	His	Leu	Gln	Glu	Arg	Val	
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Asp	Lys	Gly	Ile	Glu	Thr	Asp	Gly	Ser	Asn	Leu	Ser	Gly	Val	Ser	
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 35 40 45
 Gly Tyr Tyr Asn Gly Thr Lys Phe His Arg Ile Ile Lys Asp Phe
 50 55 60
 Met Ile Gln Gly Gly Asp Pro Thr Gly Thr Gly Arg Gly Gly Ala
 65 70 75
 Ser Ile Tyr Gly Lys Gln Phe Glu Asp Glu Leu His Pro Asp Leu
 80 85 90
 Lys Phe Thr Gly Ala Gly Ile Leu Ala Met Ala Asn Ala Gly Pro
 95 100 105
 Asp Thr Asn Gly Ser Gln Phe Phe Val Thr Leu Ala Pro Thr Gln
 110 115 120
 Trp Leu Asp Gly Lys His Thr Ile Phe Gly Arg Val Cys Gln Gly
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<210> 9
 <211> 2276
 <212> DNA
 <213> Homo Sapien

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<213> Homo Sapien

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35 40 45
Arg Ala Cys Lys Val His Leu Asp Ser Ala Val Ala Leu Ala Ala
50 55 60
Glu Ser Pro Val Asn Met Met Pro Trp Gln Gly Asp Thr Asn Asn
65 70 75
Met Ile Asp Arg Phe Asp Val Arg Ala His Leu Asp His Ile Pro
80 85 90
Asp Tyr Thr Pro Pro Leu Leu Thr Thr Ile Ser Pro Glu Gln Glu
95 100 105
Ser Asp Glu Arg Lys Cys Asn Tyr Glu Arg Tyr Arg Gly Leu Val
110 115 120
Gln Asn Asp Phe Ala Gly Ile Ser Glu Glu Gln Cys Leu Tyr Gln
125 130 135
Ile Tyr Ile Asp Glu Leu Tyr Gly Gly Leu Gln Arg Pro Ser Glu
140 145 150
Asp Glu Lys Lys Lys Leu Ala Glu Lys Lys Ala Ser Ile Gly Tyr
155 160 165
Thr Tyr Glu Asp Ser Thr Val Ala Glu Val Glu Lys Ala Ala Glu
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Lys Pro Glu Glu Glu Glu Ser Ala Ala Glu Glu Glu Ser Asn Ser
185 190 195

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Arg	Arg	Glu	Phe	Arg 275	Glu	Lys	Arg	Leu	Arg 280	Gly	Arg	Lys	Ile	Ser 285
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Lys	Arg	Ser	Pro	Ser 305	Glu	Ser	Ser	Ser	Glu 310	Ser	Arg	Ser	Arg	Ser 315
Arg	Ser	Pro	Thr	Pro 320	Gly	Arg	Glu	Glu	Lys 325	Ile	Thr	Phe	Ile	Thr 330
Ser	Phe	Gly	Gly	Ser 335	Asp	Glu	Glu	Ala	Ala 340	Ala	Ala	Ala	Ala	Ala 345
Ala	Ala	Ala	Ser	Gly 350	Val	Thr	Thr	Gly	Lys 355	Pro	Pro	Ala	Pro	Pro 360
Gln	Pro	Gly	Gly	Pro 365	Ala	Pro	Gly	Arg	Asn 370	Ala	Ser	Ala	Arg	Arg 375
Arg	Ser	Ser	Ser	Ser 380	Ser	Ser	Ser	Ser	Ser 385	Ala	Ser	Arg	Thr	Ser 390
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Ser	Trp	Ser	Arg	Ser 425	Arg	Ser	Arg	Ser	Arg 430	Arg	Tyr	Ser	Arg	Ser 435
Arg	Ser	Arg	Gly	Arg 440	Arg	His	Ser	Gly	Gly 445	Gly	Ser	Arg	Asp	Gly 450
His	Arg	Tyr	Ser	Arg 455	Ser	Pro	Ala	Arg	Arg 460	Gly	Gly	Tyr	Gly	Pro 465
Arg	Arg	Arg	Ser	Arg 470	Ser	Arg	Ser	His	Ser 475	Gly	Asp	Arg	Tyr	Arg 480
Arg	Gly	Gly	Arg	Gly	Leu	Arg	His	His	Ser	Ser	Ser	Arg	Ser	Arg

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Gln Trp Lys Ala Thr His Arg Arg Leu Tyr Gly Ala Asn Glu Glu
35 40 45
Gly Trp Arg Arg Ala Val Trp Glu Lys Asn Met Lys Met Ile Glu
50 55 60
Leu His Asn Gly Glu Tyr Ser Gln Gly Lys His Gly Phe Thr Met
65 70 75
Ala Met Asn Ala Phe Gly Asp Met Thr Asn Glu Glu Phe Arg Gln
80 85 90
Met Met Gly Cys Phe Arg Asn Gln Lys Phe Arg Lys Gly Lys Val
95 100 105

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<212> PRT

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Glu	Ala	Asn	Leu	Leu	Leu	Pro	Glu	Leu	Gly	Ser	Ala	Phe	Tyr	Asp
				620					625					630
Met	Ala	Ser	Gly	Phe	Thr	Val	Gly	Thr	Leu	Ser	Glu	Thr	Ser	Thr
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				650					655					660
Glu	Arg	Phe	Pro	Ala	Glu	Ser	Asp	Lys	Asp	Ala	Leu	Glu	Asp	His
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<210> 18
<211> 347
<212> PRT
<213> Homo Sapien

<400> 18
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35 40 45
Thr Thr Phe Tyr Phe Ile Val Ser Leu Ala Leu Ala Asp Ile Ala

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Val Gly Val Leu Val Met Pro Leu Ala	Ile Val Val Ser Leu Gly	
65	70	75
Ile Thr Ile His Phe Tyr Ser Cys Leu	Phe Met Thr Cys Leu Leu	
80	85	90
Leu Ile Phe Thr His Ala Ser Ile Met	Ser Leu Leu Ala Ile Ala	
95	100	105
Val Asp Arg Tyr Leu Arg Val Lys Leu	Thr Val Arg Phe Arg Ile	
110	115	120
Pro Gly Leu Pro Gly Cys Ile Leu Ser	Phe Gln Leu Lys Val Cys	
125	130	135
Phe Leu Pro Val Met Trp Leu Phe Ile	Leu Leu Ser Leu Ala Leu	
140	145	150
Ile Ser Asp Ala Met Val Met Asp Glu	Lys Val Lys Arg Ser Phe	
155	160	165
Val Leu Asp Thr Ala Ser Ala Ile Cys	Asn Tyr Asn Ala His Tyr	
170	175	180
Lys Asn His Pro Lys Tyr Trp Cys Arg	Gly Tyr Phe Arg Asp Tyr	
185	190	195
Cys Asn Ile Ile Ala Phe Ser Pro Asn	Ser Thr Asn His Val Ala	
200	205	210
Leu Arg Asp Thr Gly Asn Gln Leu Ile	Val Thr Met Ser Cys Leu	
215	220	225
Thr Lys Glu Asp Thr Gly Trp Tyr Trp	Cys Gly Ile Gln Arg Asp	
230	235	240
Phe Ala Arg Asp Asp Met Asp Phe Thr	Glu Leu Ile Val Thr Asp	
245	250	255
Asp Lys Gly Thr Leu Ala Asn Asp Phe	Trp Ser Gly Lys Asp Leu	
260	265	270
Ser Gly Asn Lys Thr Arg Ser Cys Lys	Ala Pro Lys Val Val Arg	
275	280	285
Lys Ala Asp Arg Ser Arg Thr Ser Ile	Leu Ile Ile Cys Ile Leu	
290	295	300
Ile Thr Gly Leu Gly Ile Ile Ser Val	Ile Ser His Leu Thr Lys	
305	310	315
Arg Arg Arg Ser Gln Arg Asn Arg Arg	Val Gly Asn Thr Leu Lys	
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Pro Phe Ser Arg Val Leu Thr Pro Lys	Glu Met Ala Pro Thr Glu	
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Gln Met

<210> 19

<211> 3906

<212> DNA

<213> Homo Sapien

<400> 19

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Leu	Lys	Gly	Arg	Phe	Gln	Arg	Asp	Arg	Arg	Asn	Ile	Arg	Pro	Asn	
				35					40					45	
Ile	Ile	Leu	Val	Leu	Thr	Asp	Asp	Gln	Asp	Val	Glu	Leu	Gly	Ser	
				50					55					60	
Met	Gln	Val	Met	Asn	Lys	Thr	Arg	Arg	Ile	Met	Glu	Gln	Gly	Gly	
				65					70					75	
Ala	His	Phe	Ile	Asn	Ala	Phe	Val	Thr	Thr	Pro	Met	Cys	Cys	Pro	
				80					85					90	
Ser	Arg	Ser	Ser	Ile	Leu	Thr	Gly	Lys	Tyr	Val	His	Asn	His	Asn	
				95					100					105	
Thr	Tyr	Thr	Asn	Asn	Glu	Asn	Cys	Ser	Ser	Pro	Ser	Trp	Gln	Ala	
				110					115					120	
Gln	His	Glu	Ser	Arg	Thr	Phe	Ala	Val	Tyr	Leu	Asn	Ser	Thr	Gly	
				125					130					135	
Tyr	Arg	Thr	Ala	Phe	Phe	Gly	Lys	Tyr	Leu	Asn	Glu	Tyr	Asn	Gly	
				140					145					150	
Ser	Tyr	Val	Pro	Pro	Gly	Trp	Lys	Glu	Trp	Val	Gly	Leu	Leu	Lys	
				155					160					165	
Asn	Ser	Arg	Phe	Tyr	Asn	Tyr	Thr	Leu	Cys	Arg	Asn	Gly	Val	Lys	
				170					175					180	
Glu	Lys	His	Gly	Ser	Asp	Tyr	Ser	Lys	Asp	Tyr	Leu	Thr	Asp	Leu	
				185					190					195	
Ile	Thr	Asn	Asp	Ser	Val	Ser	Phe	Phe	Arg	Thr	Ser	Lys	Lys	Met	
				200					205					210	
Tyr	Pro	His	Arg	Pro	Val	Leu	Met	Val	Ile	Ser	His	Ala	Ala	Pro	
				215					220					225	
His	Gly	Pro	Glu	Asp	Ser	Ala	Pro	Gln	Tyr	Ser	Arg	Leu	Phe	Pro	
				230					235					240	
Asn	Ala	Ser	Gln	His	Ile	Thr	Pro	Ser	Tyr	Asn	Tyr	Ala	Pro	Asn	
				245					250					255	
Pro	Asp	Lys	His	Trp	Ile	Met	Arg	Tyr	Thr	Gly	Pro	Met	Lys	Pro	
				260					265					270	
Ile	His	Met	Glu	Phe	Thr	Asn	Met	Leu	Gln	Arg	Lys	Arg	Leu	Gln	
				275					280					285	
Thr	Leu	Met	Ser	Val	Asp	Asp	Ser	Met	Glu	Thr	Ile	Tyr	Asn	Met	
				290					295					300	
Leu	Val	Glu	Thr	Gly	Glu	Leu	Asp	Asn	Thr	Tyr	Ile	Val	Tyr	Thr	

His Arg Cys Tyr	Ile Leu Glu Asn Asp	Thr Val Gln Cys Asp	Leu
605		610	615
Asp Leu Tyr Lys	Ser Leu Gln Ala Trp	Lys Asp His Lys Leu	His
620		625	630
Ile Asp His Glu	Ile Glu Thr Leu Gln	Asn Lys Ile Lys Asn	Leu
635		640	645
Arg Glu Val Arg	Gly His Leu Lys Lys	Lys Arg Pro Glu Glu	Cys
650		655	660
Asp Cys His Lys	Ile Ser Tyr His Thr	Gln His Lys Gly Arg	Leu
665		670	675
Lys His Arg Gly	Ser Ser Leu His Pro	Phe Arg Lys Gly Leu	Gln
680		685	690
Glu Lys Asp Lys	Val Trp Leu Leu Arg	Glu Gln Lys Arg Lys	Lys
695		700	705
Lys Leu Arg Lys	Leu Leu Lys Arg Leu	Gln Asn Asn Asp Thr	Cys
710		715	720
Ser Met Pro Gly	Leu Thr Cys Phe Thr	His Asp Asn Gln His	Trp
725		730	735
Gln Thr Ala Pro	Phe Trp Thr Leu Gly	Pro Phe Cys Ala Cys	Thr
740		745	750
Ser Ala Asn Asn	Asn Thr Tyr Trp Cys	Met Arg Thr Ile Asn	Glu
755		760	765
Thr His Asn Phe	Leu Phe Cys Glu Phe	Ala Thr Gly Phe Leu	Glu
770		775	780
Tyr Phe Asp Leu	Asn Thr Asp Pro Tyr	Gln Leu Met Asn Ala	Val
785		790	795
Asn Thr Leu Asp	Arg Asp Val Leu Asn	Gln Leu His Val Gln	Leu
800		805	810
Met Glu Leu Arg	Ser Cys Lys Gly Tyr	Lys Gln Cys Asn Pro	Arg
815		820	825
Thr Arg Asn Met	Asp Leu Asp Gly Gly	Ser Tyr Glu Gln Tyr	Arg
830		835	840
Gln Phe Gln Arg	Arg Lys Trp Pro Glu	Met Lys Arg Pro Ser	Ser
845		850	855
Lys Ser Leu Gly	Gln Leu Trp Glu Gly	Trp Glu Gly	
860		865	

<210> 21

<211> 1041

<212> DNA

<213> Homo Sapien

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 gtttctgctg agaggcggga ggcgctgaga gtctgtgcgg aggtccgtgg 150
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 cgagctgaaa tacggctgca ggctacaatt tgcagccgac gattatggaa 250
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<210> 22
 <211> 151
 <212> PRT
 <213> Homo Sapien

<400> 22
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 Ile Lys Pro Tyr His Leu Lys Arg Ile His Arg Ala Val Leu His
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 Gly Asn Leu Glu Lys Leu Lys Tyr Leu Leu Leu Thr Tyr Tyr Asp
 35 40 45

Ala	Asn	Lys	Arg	Asp	Arg	Lys	Glu	Arg	Thr	Ala	Leu	His	Leu	Ala	
				50					55					60	
Cys	Ala	Thr	Gly	Gln	Pro	Glu	Met	Val	His	Leu	Leu	Val	Ser	Arg	
				65					70					75	
Arg	Cys	Glu	Leu	Asn	Leu	Cys	Asp	Arg	Glu	Asp	Arg	Thr	Pro	Leu	
				80					85					90	
Ile	Lys	Ala	Val	Gln	Leu	Arg	Gln	Glu	Ala	Cys	Ala	Thr	Leu	Leu	
				95					100					105	
Leu	Gln	Asn	Gly	Ala	Asn	Pro	Asn	Ile	Thr	Asp	Phe	Phe	Gly	Arg	
				110					115					120	
Thr	Ala	Leu	His	Tyr	Ala	Val	Tyr	Asn	Glu	Asp	Thr	Ser	Met	Ile	
				125					130					135	
Glu	Lys	Leu	Leu	Ser	His	Gly	Thr	Asn	Ile	Glu	Glu	Cys	Ser	Lys	
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Val

<210> 23
 <211> 1121
 <212> DNA
 <213> Homo Sapien

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 tcaaagttca agtagtgata tggatgactc cacagaaagg gagcagtcac 200
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 gatcttacac atttgttcca tggcttctca gctttaaaag gggaagtgcc 700

ctagaagaaa aagagaataa aatattggtc aaagaaactg gttacttttt 750
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 actttgtttc gatgtattca aaatatgcct gaaacactac ccaataattc 900
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<210> 24
 <211> 285
 <212> PRT
 <213> Homo Sapien

<400> 24
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 Leu Pro Arg Lys Glu Ser Pro Ser Val Arg Ser Ser Lys Asp Gly
 35 40 45
 Lys Leu Leu Ala Ala Thr Leu Leu Leu Ala Leu Leu Ser Cys Cys
 50 55 60
 Leu Thr Val Val Ser Phe Tyr Gln Val Ala Ala Leu Gln Gly Asp
 65 70 75
 Leu Ala Ser Leu Arg Ala Glu Leu Gln Gly His His Ala Glu Lys
 80 85 90
 Leu Pro Ala Gly Ala Gly Ala Pro Lys Ala Gly Leu Glu Glu Ala
 95 100 105
 Pro Ala Val Thr Ala Gly Leu Lys Ile Phe Glu Pro Pro Ala Pro
 110 115 120
 Gly Glu Gly Asn Ser Ser Gln Asn Ser Arg Asn Lys Arg Ala Val
 125 130 135
 Gln Gly Pro Glu Glu Thr Val Thr Gln Asp Cys Leu Gln Leu Ile
 140 145 150
 Ala Asp Ser Glu Thr Pro Thr Ile Gln Lys Gly Ser Tyr Thr Phe
 155 160 165
 Val Pro Trp Leu Leu Ser Phe Lys Arg Gly Ser Ala Leu Glu Glu

	170		175		180
Lys Glu Asn Lys	Ile Leu Val Lys Glu Thr Gly Tyr Phe Phe Ile				
	185		190		195
Tyr Gly Gln Val	Leu Tyr Thr Asp Lys Thr Tyr Ala Met Gly His				
	200		205		210
Leu Ile Gln Arg	Lys Lys Val His Val Phe Gly Asp Glu Leu Ser				
	215		220		225
Leu Val Thr Leu	Phe Arg Cys Ile Gln Asn Met Pro Glu Thr Leu				
	230		235		240
Pro Asn Asn Ser	Cys Tyr Ser Ala Gly Ile Ala Lys Leu Glu Glu				
	245		250		255
Gly Asp Glu Leu	Gln Leu Ala Ile Pro Arg Glu Asn Ala Gln Ile				
	260		265		270
Ser Leu Asp Gly	Asp Val Thr Phe Phe Gly Ala Leu Lys Leu Leu				
	275		280		285

<210> 25
 <211> 2698
 <212> DNA
 <213> Homo Sapien

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 aaggaggtga tggggcttgc gctggcttgt cttcccaccc aagtgaagag 200
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 aattttgggt gggatagggg cataggcttg tgaagggcag tccggatccg 300
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<211> 296

<212> PRT

<213> Homo Sapien

<400> 26

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				20					25					30
Gln	Glu	Leu	Phe	Gln	Leu	Ser	Gln	Tyr	Leu	Gln	Glu	Ala	Leu	His
				35					40					45
Arg	Glu	Gln	Met	Leu	Glu	Gln	Lys	Leu	Ala	Thr	Leu	Gln	Arg	Leu
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Leu	Ala	Ile	Thr	Gln	Glu	Ala	Ser	Asp	Thr	Ser	Trp	Gln	Ala	Leu
				65					70					75
Ile	Asp	Glu	Asp	Arg	Leu	Leu	Ser	Arg	Leu	Glu	Val	Met	Gly	Asn
				80					85					90
Gln	Leu	Gln	Ala	Cys	Ser	Lys	Asn	Gln	Thr	Glu	Asp	Ser	Leu	Arg
				95					100					105
Lys	Glu	Leu	Ile	Ala	Leu	Gln	Glu	Asp	Lys	His	Asn	Tyr	Glu	Thr
				110					115					120
Thr	Ala	Lys	Glu	Ser	Leu	Arg	Arg	Val	Leu	Gln	Glu	Lys	Ile	Glu
				125					130					135
Val	Val	Arg	Lys	Leu	Ser	Glu	Val	Glu	Arg	Ser	Leu	Ser	Asn	Thr
				140					145					150
Glu	Asp	Glu	Cys	Thr	His	Leu	Lys	Glu	Met	Asn	Glu	Arg	Thr	Gln
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Glu	Glu	Leu	Arg	Glu	Leu	Ala	Asn	Lys	Tyr	Asn	Gly	Ala	Val	Asn	
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Glu	Ile	Lys	Asp	Leu	Ser	Asp	Lys	Leu	Lys	Val	Ala	Glu	Gly	Lys	
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Gln	Glu	Glu	Ile	Gln	Gln	Lys	Gly	Gln	Ala	Glu	Lys	Lys	Glu	Leu	
				200					205					210	
Gln	His	Lys	Ile	Asp	Glu	Met	Glu	Glu	Lys	Glu	Gln	Glu	Leu	Gln	
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Ala	Lys	Ile	Glu	Ala	Leu	Gln	Ala	Asp	Asn	Asp	Phe	Thr	Asn	Glu	
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Arg	Leu	Thr	Ala	Leu	Gln	Val	Arg	Leu	Glu	His	Leu	Gln	Glu	Lys	
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Thr	Leu	Lys	Glu	Cys	Ser	Ser	Leu	Ala	Asp	Arg	Arg	Arg	Ala	Ser	
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Asn	Gln	Ser	Gly	Arg	Arg	Asn	Lys	Ala	Phe	Lys	Arg	Phe	Val	Phe	
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Cys	Phe	Ser	Met	Phe	Phe	Asp	Ser	Ser	Phe	Gly					
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 <212> DNA
 <213> Homo Sapien

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Tyr Gly Val Leu Thr Asn Ser Leu Gly	Leu Ile Ser Asp Gly Phe	440	445	450
His Met Leu Phe Asp Cys Ser Ala Leu Val Met Gly Leu Phe Ala		455	460	465
Ala Leu Met Ser Arg Trp Lys Ala Thr Arg Ile Phe Ser Tyr Gly		470	475	480
Tyr Gly Arg Ile Glu Ile Leu Ser Gly Phe Ile Asn Gly Leu Phe		485	490	495
Leu Ile Val Ile Ala Phe Phe Val Phe Met Glu Ser Val Ala Arg		500	505	510
Leu Ile Asp Pro Pro Glu Leu Asp Thr His Met Leu Thr Pro Val		515	520	525
Ser Val Gly Gly Leu Ile Val Asn Leu Ile Gly Ile Cys Ala Phe		530	535	540
Ser His Ala His Ser His Ala His Gly Ala Ser Gln Gly Ser Cys		545	550	555
His Ser Ser Asp His Ser His Ser His His Met His Gly His Ser		560	565	570
Asp His Gly His Gly His Ser His Gly Ser Ala Gly Gly Gly Met		575	580	585
Asn Ala Asn Met Arg Gly Val Phe Leu His Val Leu Ala Asp Thr		590	595	600
Leu Gly Ser Ile Gly Val Ile Val Ser Thr Val Leu Ile Glu Gln		605	610	615
Phe Gly Trp Phe Ile Ala Asp Pro Leu Cys Ser Leu Ser Thr Ala		620	625	630
Ile Leu Ile Phe Leu Ser Val Val Pro Leu Ile Lys Asp Ala Cys		635	640	645
Gln Val Leu Leu Leu Arg Leu Pro Pro Glu Tyr Glu Lys Glu Leu		650	655	660
His Ile Ala Leu Glu Lys Ile Gln Lys Ile Glu Gly Leu Ile Ser		665	670	675
Tyr Arg Asp Pro His Phe Trp Arg His Ser Ala Ser Ile Val Ala		680	685	690
Gly Thr Ile His Ile Gln Val Thr Ser Asp Val Leu Glu Gln Arg		695	700	705
Ile Val Gln Gln Val Thr Gly Ile Leu Lys Asp Ala Gly Val Asn		710	715	720
Asn Leu Thr Ile Gln Val Glu Lys Glu Ala Tyr Phe Gln His Met				

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Ser Gly Leu Ser Thr Gly Phe His Asp Val Leu Ala Met Thr Lys					
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Gln Met Glu Ser Met Lys Tyr Cys Lys Asp Gly Thr Tyr Ile Met					
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 <211> 1701
 <212> DNA
 <213> Homo Sapien

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<210> 30
 <211> 223
 <212> PRT
 <213> Homo Sapien

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 35 40 45
 Phe His Lys Leu Ala Met Lys Tyr His Pro Asp Lys Asn Lys Ser
 50 55 60
 Pro Asp Ala Glu Ala Lys Phe Arg Glu Ile Ala Glu Ala Tyr Glu
 65 70 75
 Thr Leu Ser Asp Ala Asn Arg Arg Lys Glu Tyr Asp Thr Leu Gly
 80 85 90
 His Ser Ala Phe Thr Ser Gly Lys Gly Gln Arg Gly Ser Gly Ser
 95 100 105
 Ser Phe Glu Gln Ser Phe Asn Phe Asn Phe Asp Asp Leu Phe Lys
 110 115 120
 Asp Phe Gly Phe Phe Gly Gln Asn Gln Asn Thr Gly Ser Lys Lys
 125 130 135

Arg	Phe	Glu	Asn	His	Phe	Gln	Thr	Arg	Gln	Asp	Gly	Gly	Ser	Ser
				140					145					150
Arg	Gln	Arg	His	His	Phe	Gln	Glu	Phe	Ser	Phe	Gly	Gly	Gly	Leu
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Phe	Asp	Asp	Met	Phe	Glu	Asp	Met	Glu	Lys	Met	Phe	Ser	Phe	Ser
			170						175					180
Gly	Phe	Asp	Ser	Thr	Asn	Gln	His	Thr	Val	Gln	Thr	Glu	Asn	Arg
			185						190					195
Phe	His	Gly	Ser	Ser	Lys	His	Cys	Arg	Thr	Val	Thr	Gln	Arg	Arg
			200						205					210
Gly	Asn	Met	Val	Thr	Thr	Tyr	Thr	Asp	Cys	Ser	Gly	Gln		
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<210> 31

<211> 2056

<212> DNA

<213> Homo Sapien

<400> 31

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 <211> 2531
 <212> DNA
 <213> Homo Sapien

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<210> 34
<211> 328
<212> PRT
<213> Homo Sapien
<400> 34

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Pro	Met	Thr	Tyr	Ser	His	Arg	Leu	Glu	Glu	Ile	Arg	Leu	His	Phe	
				125					130					135	
Gly	Ser	Glu	Asp	Ser	Gln	Gly	Ser	Glu	His	Leu	Leu	Asn	Gly	Gln	
				140					145					150	
Ala	Phe	Ser	Gly	Glu	Val	Gln	Leu	Ile	His	Tyr	Asn	His	Glu	Leu	
				155					160					165	
Tyr	Thr	Asn	Val	Thr	Glu	Ala	Ala	Lys	Ser	Pro	Asn	Gly	Leu	Val	
				170					175					180	
Val	Val	Ser	Ile	Phe	Ile	Lys	Val	Ser	Asp	Ser	Ser	Asn	Pro	Phe	
				185					190					195	
Leu	Asn	Arg	Met	Leu	Asn	Arg	Asp	Thr	Ile	Thr	Arg	Ile	Thr	Tyr	
				200					205					210	
Lys	Asn	Asp	Ala	Tyr	Leu	Leu	Gln	Gly	Leu	Asn	Ile	Glu	Glu	Leu	
				215					220					225	
Tyr	Pro	Glu	Thr	Ser	Ser	Phe	Ile	Thr	Tyr	Asp	Gly	Ser	Met	Thr	
				230					235					240	
Ile	Pro	Pro	Cys	Tyr	Glu	Thr	Ala	Ser	Trp	Ile	Ile	Met	Asn	Lys	
				245					250					255	
Pro	Val	Tyr	Ile	Thr	Arg	Met	Gln	Met	His	Ser	Leu	Arg	Leu	Leu	
				260					265					270	
Ser	Gln	Asn	Gln	Pro	Ser	Gln	Ile	Phe	Leu	Ser	Met	Ser	Asp	Asn	
				275					280					285	
Phe	Arg	Pro	Val	Gln	Pro	Leu	Asn	Asn	Arg	Cys	Ile	Arg	Thr	Asn	

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Ile Asn Phe Ser	Leu Gln Gly Lys Asp	Cys Pro Asn Asn Arg	Ala		
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	320	325			

<210> 35
 <211> 3371
 <212> DNA
 <213> Homo Sapien

<400> 35
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 ggggcctccg gaccagtgc cccagtcaaa ccagaggggt cttggggcggc 400
 agcgacgaag gaggtattca ggctccaggc caggtggggc cggacgcccc 450
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 ggcaccccc aggacctcaa gaccaaggc aacgtgcagg tcatctacct 800
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<210> 36
<211> 674
<212> PRT
<213> Homo Sapien

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<400> 36
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Ala Thr Val Thr Ala Thr Val Val Met Thr Thr Ala Thr Met Asp
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Leu Arg Asp Trp Leu Phe Leu Cys Tyr Gly Leu Ile Ala Phe Leu
                35                      40                     45

Thr Glu Val Ile Asp Ser Thr Thr Cys Pro Ser Val Cys Arg Cys
                50                      55                     60

Asp Asn Gly Phe Ile Tyr Cys Asn Asp Arg Gly Leu Thr Ser Ile
                65                      70                     75

Pro Ala Asp Ile Pro Asp Asp Ala Thr Thr Leu Tyr Leu Gln Asn
                80                      85                     90

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<210> 37
<211> 3501
<212> DNA
<213> Homo Sapien

<220>
<221> unsure
<222> 2762, 2778
<223> unknown base

<400> 37
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agccaccatc tctccgccag agtcaggaga agaactgaga ggcgcatacc 200
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<210> 38
 <211> 1013
 <212> PRT
 <213> Homo Sapien

<220>
 <221> unsure
 <222> 877, 882
 <223> unknown amino acid

<400> 38
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 Trp Ala Gly Thr Ala Phe Gln Val Thr Gln Gly Thr Gly Pro Glu
 35 40 45
 Leu His Ala Cys Lys Glu Ser Glu Tyr His Tyr Glu Tyr Thr Ala
 50 55 60

Cys	Asp	Ser	Thr	Gly	Ser	Arg	Trp	Arg	Val	Ala	Val	Pro	His	Thr		
				65					70					75		
Pro	Gly	Leu	Cys	Thr	Ser	Leu	Ser	Asp	Pro	Val	Lys	Gly	Thr	Glu		
				80					85					90		
Cys	Ser	Phe	Ser	Cys	Asn	Ala	Gly	Glu	Phe	Leu	Asp	Met	Lys	Asp		
				95					100					105		
Gln	Ser	Cys	Lys	Pro	Cys	Ala	Glu	Gly	Arg	Tyr	Ser	Leu	Gly	Thr		
				110					115					120		
Gly	Ile	Arg	Phe	Asp	Glu	Trp	Asp	Glu	Leu	Pro	His	Gly	Phe	Ala		
				125					130					135		
Ser	Leu	Ser	Ala	Asn	Met	Glu	Leu	Asp	Asp	Ser	Ala	Ala	Glu	Ser		
				140					145					150		
Thr	Gly	Asn	Cys	Thr	Ser	Ser	Lys	Trp	Val	Pro	Arg	Gly	Asp	Tyr		
				155					160					165		
Ile	Ala	Ser	Asn	Thr	Asp	Glu	Cys	Thr	Ala	Thr	Leu	Met	Tyr	Ala		
				170					175					180		
Val	Asn	Leu	Lys	Gln	Ser	Gly	Thr	Val	Asn	Phe	Glu	Tyr	Tyr	Tyr		
				185					190					195		
Pro	Asp	Ser	Ser	Ile	Ile	Phe	Glu	Phe	Phe	Val	Gln	Asn	Asp	Gln		
				200					205					210		
Cys	Gln	Pro	Asn	Ala	Asp	Asp	Ser	Arg	Trp	Met	Lys	Thr	Thr	Glu		
				215					220					225		
Lys	Gly	Trp	Glu	Phe	His	Ser	Val	Glu	Leu	Asn	Arg	Gly	Asn	Asn		
				230					235					240		
Val	Leu	Tyr	Trp	Arg	Thr	Thr	Ala	Phe	Ser	Val	Trp	Thr	Lys	Val		
				245					250					255		
Pro	Lys	Pro	Val	Leu	Val	Arg	Asn	Ile	Ala	Ile	Thr	Gly	Val	Ala		
				260					265					270		
Tyr	Thr	Ser	Glu	Cys	Phe	Pro	Cys	Lys	Pro	Gly	Thr	Tyr	Ala	Asp		
				275					280					285		
Lys	Gln	Gly	Ser	Ser	Phe	Cys	Lys	Leu	Cys	Pro	Ala	Asn	Ser	Tyr		
				290					295					300		
Ser	Asn	Lys	Gly	Glu	Thr	Ser	Cys	His	Gln	Cys	Asp	Pro	Asp	Lys		
				305					310					315		
Tyr	Ser	Glu	Lys	Gly	Ser	Ser	Ser	Cys	Asn	Val	Arg	Pro	Ala	Cys		
				320					325					330		
Thr	Asp	Lys	Asp	Tyr	Phe	Tyr	Thr	His	Thr	Ala	Cys	Asp	Ala	Asn		
				335					340					345		
Gly	Glu	Thr	Gln	Leu	Met	Tyr	Lys	Trp	Ala	Lys	Pro	Lys	Ile	Cys		

Lys	Asn	Asn	Lys	Ile	His	Ser	Leu	Cys	Tyr	Asn	Asp	Cys	Thr	Phe	
				650					655					660	
Ser	Arg	Asn	Thr	Pro	Thr	Arg	Thr	Phe	Asn	Tyr	Asn	Phe	Ser	Ala	
				665					670					675	
Leu	Ala	Asn	Thr	Val	Thr	Leu	Ala	Gly	Gly	Pro	Ser	Phe	Thr	Ser	
				680					685					690	
Lys	Gly	Leu	Lys	Tyr	Phe	His	His	Phe	Thr	Leu	Ser	Leu	Cys	Gly	
				695					700					705	
Asn	Gln	Gly	Arg	Lys	Met	Ser	Val	Cys	Thr	Asp	Asn	Val	Thr	Asp	
				710					715					720	
Leu	Arg	Ile	Pro	Glu	Gly	Glu	Ser	Gly	Phe	Ser	Lys	Ser	Ile	Thr	
				725					730					735	
Ala	Tyr	Val	Cys	Gln	Ala	Val	Ile	Ile	Pro	Pro	Glu	Val	Thr	Gly	
				740					745					750	
Tyr	Lys	Ala	Gly	Val	Ser	Ser	Gln	Pro	Val	Ser	Leu	Ala	Asp	Arg	
				755					760					765	
Leu	Ile	Gly	Val	Thr	Thr	Asp	Met	Thr	Leu	Asp	Gly	Ile	Thr	Ser	
				770					775					780	
Pro	Ala	Glu	Leu	Phe	His	Leu	Glu	Ser	Leu	Gly	Ile	Pro	Asp	Val	
				785					790					795	
Ile	Phe	Phe	Tyr	Arg	Ser	Asn	Asp	Val	Thr	Gln	Ser	Cys	Ser	Ser	
				800					805					810	
Gly	Arg	Ser	Thr	Thr	Ile	Arg	Val	Arg	Cys	Ser	Pro	Gln	Lys	Thr	
				815					820					825	
Val	Pro	Gly	Ser	Leu	Leu	Leu	Pro	Gly	Thr	Cys	Ser	Asp	Gly	Thr	
				830					835					840	
Cys	Asp	Gly	Cys	Asn	Phe	His	Phe	Leu	Trp	Glu	Ser	Ala	Ala	Ala	
				845					850					855	
Cys	Pro	Leu	Cys	Ser	Val	Ala	Asp	Tyr	His	Ala	Ile	Val	Ser	Ser	
				860					865					870	
Cys	Val	Ala	Gly	Ile	Gln	Xaa	Thr	Thr	Tyr	Val	Xaa	Arg	Glu	Pro	
				875					880					885	
Lys	Leu	Cys	Ser	Gly	Gly	Ile	Ser	Leu	Pro	Glu	Gln	Arg	Val	Thr	
				890					895					900	
Ile	Cys	Lys	Thr	Ile	Asp	Phe	Trp	Leu	Lys	Val	Gly	Ile	Ser	Ala	
				905					910					915	
Gly	Thr	Cys	Thr	Ala	Ile	Leu	Leu	Thr	Val	Leu	Thr	Cys	Tyr	Phe	
				920					925					930	
Trp	Lys	Lys	Asn	Gln	Lys	Leu	Glu	Tyr	Lys	Tyr	Ser	Lys	Leu	Val	

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Met Asn Ala Thr Leu Lys Asp Cys Asp	Leu Pro Ala Ala Asp Ser	
950	955	960
Cys Ala Ile Met Glu Gly Glu Asp Val	Glu Asp Asp Leu Ile Phe	
965	970	975
Thr Ser Lys Lys Ser Leu Phe Gly Lys	Ile Lys Ser Phe Thr Ser	
980	985	990
Lys Arg Thr Pro Asp Gly Phe Asp Ser	Val Pro Leu Lys Thr Ser	
995	1000	1005
Ser Gly Gly Pro Asp Met Asp Leu		
1010		

<210> 39
 <211> 2998
 <212> DNA
 <213> Homo Sapien

<400> 39
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 cacactaaat tgcaaaaatt atcccagtgc tggaggaggg cagcaggttg 450
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 ccttcaaagg gacgactctg taagattctc tgctacttat tcaagttgac 600
 acgatgcctt tcacactcca cctgaggtcc cgccttccct ctgccataag 650
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 ccagcttttg aaagattctg ccagggtcaac actggtcctc taccctgct 800
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 cagagaccag gatgggcat cccagttct ggaaatacga gttcggtgcc 900

Gly	Leu	Pro	Arg	Arg	Asp	Pro	Ala	Gly	His	Ser	Gln	Ala	Gly	Ala	140	145	150
Tyr	Lys	Thr	Thr	Val	Pro	Cys	Val	Thr	His	Ala	Gly	Phe	Cys	Cys	155	160	165
Pro	Leu	Val	Val	Thr	Met	Arg	Pro	Ile	Pro	Lys	Asp	Lys	Leu	Glu	170	175	180
Gly	Leu	Val	Arg	Ala	Cys	Cys	Ser	Leu	Gly	Gly	Glu	Gln	Gly	Gln	185	190	195
Pro	Val	His	Met	Gly	Asp	Pro	Glu	Leu	Leu	Gly	Ile	Lys	Glu	Leu	200	205	210
Ser	Lys	Pro	Ala	Tyr	Gly	Asp	Ala	Met	Val	Cys	Pro	Pro	Gly	Glu	215	220	225
Val	Pro	Val	Phe	Trp	Pro	Ser	Pro	Leu	Thr	Ser	Leu	Gly	Ala	Val	230	235	240
Ser	Ser	Cys	Glu	Thr	Pro	Leu	Ala	Phe	Ala	Ser	Ile	Pro	Gly	Cys	245	250	255
Thr	Val	Met	Thr	Asp	Leu	Lys	Asp	Ala	Lys	Ala	Pro	Pro	Gly	Cys	260	265	270
Leu	Thr	Pro	Glu	Arg	Ile	Pro	Glu	Val	His	His	Ile	Ser	Gln	Asp	275	280	285
Pro	Leu	His	Tyr	Ser	Ile	Ala	Ser	Val	Ser	Ala	Ser	Gln	Lys	Ile	290	295	300
Arg	Glu	Leu	Glu	Ser	Met	Ile	Gly	Ile	Asp	Pro	Gly	Asn	Arg	Gly	305	310	315
Ile	Gly	His	Leu	Leu	Cys	Lys	Asp	Glu	Leu	Leu	Lys	Ala	Ser	Leu	320	325	330
Ser	Leu	Ser	His	Ala	Arg	Ser	Val	Leu	Ile	Thr	Thr	Gly	Phe	Pro	335	340	345
Thr	His	Phe	Asn	His	Glu	Pro	Pro	Glu	Glu	Thr	Asp	Gly	Pro	Pro	350	355	360
Gly	Ala	Val	Ala	Leu	Val	Ala	Phe	Leu	Gln	Ala	Leu	Glu	Lys	Glu	365	370	375
Val	Ala	Ile	Ile	Val	Asp	Gln	Arg	Ala	Trp	Asn	Leu	His	Gln	Lys	380	385	390
Ile	Val	Glu	Asp	Ala	Val	Glu	Gln	Gly	Val	Leu	Lys	Thr	Gln	Ile	395	400	405
Pro	Ile	Leu	Thr	Tyr	Gln	Gly	Gly	Ser	Val	Glu	Ala	Ala	Gln	Ala	410	415	420
Phe	Leu	Cys	Lys	Asn	Gly	Asp	Pro	Gln	Thr	Pro	Arg	Phe	Asp	His			

425	430	435
Leu Val Ala Ile Glu Arg Ala Gly Arg	Ala Ala Asp Gly Asn Tyr	
440	445	450
Tyr Asn Ala Arg Lys Met Asn Ile Lys	His Leu Val Asp Pro Ile	
455	460	465
Asp Asp Leu Phe Leu Ala Ala Lys Lys	Ile Pro Gly Ile Ser Ser	
470	475	480
Thr Gly Val Gly Asp Gly Gly Asn Glu	Leu Gly Met Gly Lys Val	
485	490	495
Lys Glu Ala Val Arg Arg His Ile Arg	His Gly Asp Val Ile Ala	
500	505	510
Cys Asp Val Glu Ala Asp Phe Ala Val	Ile Ala Gly Val Ser Asn	
515	520	525
Trp Gly Gly Tyr Ala Leu Ala Cys Ala	Leu Tyr Ile Leu Tyr Ser	
530	535	540
Cys Ala Val His Ser Gln Tyr Leu Arg	Lys Ala Val Gly Pro Ser	
545	550	555
Arg Ala Pro Gly Asp Gln Ala Trp Thr	Gln Ala Leu Pro Ser Val	
560	565	570
Ile Lys Glu Glu Lys Met Leu Gly Ile	Leu Val Gln His Lys Val	
575	580	585
Arg Ser Gly Val Ser Gly Ile Val Gly	Met Glu Val Asp Gly Leu	
590	595	600
Pro Phe His Asn Thr His Ala Glu Met	Ile Gln Lys Leu Val Asp	
605	610	615
Val Thr Thr Ala Gln Val		
620		

<210> 41
 <211> 889
 <212> DNA
 <213> Homo Sapien

<400> 41
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 cccatgtgat ttcccactgg atccaggccc ccatccggct ggcaggaggg 150
 ggctctgacg tacaggttgg aaatcagaag tctgtgagag cgcgggagtg 200
 catggcagct ctgggtccca gacctggccc gacctctctg cttcacctcc 250
 agctctgctg ctctctact cttgggtcga gatccctttg gagccacagc 300

gaggaaccct gtggctcctca ggcaggtgta ccttgagtca gccaggagcc 350
 ctcttttcct gtgtcaaagc ctgccctcgg gctctgctca cctctgggtga 400
 cccccaaga tgcccctgcc ctcaagttcc cctcatgac tggcctctgc 450
 ccccttctct agccacagcc tctagtacac tttagcaata ccaccagact 500
 agttagagtt ccccaactcac caagcaagac atgcagtttc atgcctctgt 550
 gccttcgctc atgctgtttc ttccgactgg aatgccttcc cctgctcctc 600
 ctgccttgtc tgccctggcaa gttcatctct cagcatcccc tcaaaggccc 650
 cctcctccag gaaggcaacc cctgtgcccc tcccctccag gctacctctg 700
 cactttgtca atgcttctct tgtggcactt atcacactgt attttacttg 750
 tttacatgtt tgtctccctt tctagactgt gaatccttaa gggcatggac 800
 tgtatcttat gcatctctgt atttctgcgc ctagcacggg gcctagcaca 850
 cagtaggcgc tcaataaatg ttgaatgaat gaatgattt 889

<210> 42

<211> 83

<212> PRT

<213> Homo Sapien

<400> 42

Met	Gln	Phe	His	Ala	Ser	Val	Pro	Ser	Leu	Met	Leu	Phe	Leu	Pro
1				5					10					15
Thr	Gly	Met	Pro	Ser	Pro	Ala	Pro	Pro	Ala	Leu	Ser	Ala	Trp	Gln
				20					25					30
Val	His	Leu	Ser	Arg	Ser	Pro	Gln	Arg	Pro	Pro	Pro	Pro	Gly	Arg
				35					40					45
Gln	Pro	Leu	Cys	Pro	Ser	Pro	Pro	Gly	Tyr	Leu	Cys	Thr	Leu	Ser
				50					55					60
Met	Leu	Leu	Leu	Trp	His	Leu	Ser	His	Cys	Ile	Leu	Leu	Val	Tyr
				65					70					75
Met	Phe	Val	Ser	Pro	Ser	Arg	Leu							
				80										

<210> 43

<211> 1356

<212> DNA

<213> Homo Sapien

<400> 43

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 acctcctacg agatgatgat gcagtgtgtg tcccgcatgt tggcccaccc 100

cctgcatgtc atctcaatgc gctgcatggg ccagtttgtg ggacgggagg 150
ccaagtacag tgggtgtgctg agctccattg ggaagatttt caaagaggaa 200
gggctgctgg gattcttcgt tggattaatc cctcacctcc tgggcgatgt 250
ggttttcttg tggggctgta acctgctggc ccacttcac c atgcctacc 300
tgggtgatga cagcttcagc caggccctgg ccatccggag ctataccaag 350
ttcgtgatgg ggattgcagt gagcatgctg acctaccct tctgtctagt 400
tggcgacctc atgggtgtga acaactgcgg gctgcaagct gggctcccc 450
cttactcccc agtgttcaaa tcttggtatc actgctggaa gtacctgagt 500
gtgcagggcc agctcttccg aggtccagc ctgcttttcc gccgggtgtc 550
atcaggatca tgctttgccc tggagtaacc tgaatcatct aaaaaacacg 600
gtctcaacct ggccactgtg ggtgaggcct gaccaccttg ggacacctgc 650
aagacgactc caaccaaca acaaccagat gtgctccagc ccagccgggc 700
ttcagttcca tatttgccat gtgtctgtcc agatgtgggg ttgagcgggg 750
gtggggctgc acccagtga ttgggtcacc cggcagacct agggaaggtg 800
aggcgaggtg gggagttggc agaatcccca tacctcgcag atttgctgag 850
tctgtcttgt gcagagggcc agagaatggc ttatgggggc ccaggttggg 900
tggggaaagg ctaatggggg cagacccac cccgtctacc cctccagtca 950
gcccagcgcc catcctgcag ctcagctggg agcatcatc tctgctttg 1000
tacatagggg gtggtccctt ggcacgtggc caccatcatg tctaggccta 1050
tgctaggagg caaatggcca ggtctgcct gtgtttttct caacactact 1100
tttctgatat gagggcagca cctgcctctg aatgggaaat catgcaacta 1150
ctcagaatgt gtccctcctc tctaatgctc atctgtttta tgggtgatgcc 1200
tcgcgtacag gatctgggta cctgtgcagt tgtgaatacc cagaggttgg 1250
gcagatcagt gtctctagtc ctaccagtt ttaaagttca tggtaagatt 1300
tgacctcatc tcccgcaaat aatgtattg gtgatttggg aaaaaaaaaa 1350
aaaaaa 1356

<210> 44
<211> 171
<212> PRT
<213> Homo Sapien
<400> 44

Met Met Met Gln Cys Val Ser Arg Met Leu Ala His Pro Leu His
 1 5 10 15
 Val Ile Ser Met Arg Cys Met Val Gln Phe Val Gly Arg Glu Ala
 20 25 30
 Lys Tyr Ser Gly Val Leu Ser Ser Ile Gly Lys Ile Phe Lys Glu
 35 40 45
 Glu Gly Leu Leu Gly Phe Phe Val Gly Leu Ile Pro His Leu Leu
 50 55 60
 Gly Asp Val Val Phe Leu Trp Gly Cys Asn Leu Leu Ala His Phe
 65 70 75
 Ile Asn Ala Tyr Leu Val Asp Asp Ser Phe Ser Gln Ala Leu Ala
 80 85 90
 Ile Arg Ser Tyr Thr Lys Phe Val Met Gly Ile Ala Val Ser Met
 95 100 105
 Leu Thr Tyr Pro Phe Leu Leu Val Gly Asp Leu Met Ala Val Asn
 110 115 120
 Asn Cys Gly Leu Gln Ala Gly Leu Pro Pro Tyr Ser Pro Val Phe
 125 130 135
 Lys Ser Trp Ile His Cys Trp Lys Tyr Leu Ser Val Gln Gly Gln
 140 145 150
 Leu Phe Arg Gly Ser Ser Leu Leu Phe Arg Arg Val Ser Ser Gly
 155 160 165
 Ser Cys Phe Ala Leu Glu
 170

<210> 45

<211> 2237

<212> DNA

<213> Homo Sapien

<400> 45

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 aatgtctgca gcttcactcc tgaagccagc gagaccacga acccaccagg 100
 aggaacaaac aactccagac ggcgagcctt aagagctgta acactcaccg 150
 cgaaggtctg cagcttcact cctgagccag ccagaccacg aaccaccag 200
 aaggaagaaa ctccaaacac atccgaacat cagaaggagc aaactcgtga 250
 cagccacct ttaagaaccg tgacactcaa cgctagggtc cgcggcttca 300
 ttcttgaagt cagtgagacc aagaaccac caattccgga cacggcaaag 350
 taacatccta gacatggctt tagagatcca catgtcagac cccatgtgcc 400

tcacgcagaa ctttaatgag cagctgaagg ttaatcagga agctttggag 450
atcctgtctg ccattacgca acctgtagtt gtggtagcga ttgtgggcct 500
ctatcgcaact ggcaaactct acctgatgaa caagctggct gggaagaaca 550
agggcttctc tgttgcatct acggtgcagt ctcacaccaa gggaatttgg 600
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tgacaccgag ggccctgggag atgtagagaa ggctgacaac aagaatgata 700
tccagatctt tgcaactggca ctcttactga gcagcacctt tgtgtacaat 750
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agaactgaca gatctgctca aggcaagaaa ctcacctgac cttgacaggg 850
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cttccagggt gcatcatggt caatggatct cgtctaaaga acctgggtgct 1250
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tgaaaaggct gaagcgcaaa ggttggcggc gattcaaagg cagaacgagc 1900
 aaatgatgca ggagagggag agactccatc aggaacaagt gagacaaatg 1950
 gagatagcca aacaaaattg gctggcagag caacagaaaa tgcaggaaca 2000
 acagatgcag gaacaggctg cacagctcag cacaacattc caagctcaaa 2050
 atagaagcct tctcagttag ctccagcacg cccagagggc tgttaataac 2100
 gatgatccat gtgttttact ctaaagtgtt aaatatggga gtttcctttt 2150
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 gacaatcaac atttaaataa actttataat tattaata 2237

<210> 46

<211> 586

<212> PRT

<213> Homo Sapien

<400> 46

Met	Ala	Leu	Glu	Ile	His	Met	Ser	Asp	Pro	Met	Cys	Leu	Ile	Glu	1	5	10	15
Asn	Phe	Asn	Glu	Gln	Leu	Lys	Val	Asn	Gln	Glu	Ala	Leu	Glu	Ile	20	25	30	
Leu	Ser	Ala	Ile	Thr	Gln	Pro	Val	Val	Val	Ala	Ile	Val	Gly	35	40	45		
Leu	Tyr	Arg	Thr	Gly	Lys	Ser	Tyr	Leu	Met	Asn	Lys	Leu	Ala	Gly	50	55	60	
Lys	Asn	Lys	Gly	Phe	Ser	Val	Ala	Ser	Thr	Val	Gln	Ser	His	Thr	65	70	75	
Lys	Gly	Ile	Trp	Ile	Trp	Cys	Val	Pro	His	Pro	Asn	Trp	Pro	Asn	80	85	90	
His	Thr	Leu	Val	Leu	Leu	Asp	Thr	Glu	Gly	Leu	Gly	Asp	Val	Glu	95	100	105	
Lys	Ala	Asp	Asn	Lys	Asn	Asp	Ile	Gln	Ile	Phe	Ala	Leu	Ala	Leu	110	115	120	
Leu	Leu	Ser	Ser	Thr	Phe	Val	Tyr	Asn	Thr	Val	Asn	Lys	Ile	Asp	125	130	135	
Gln	Gly	Ala	Ile	Asp	Leu	Leu	His	Asn	Val	Thr	Glu	Leu	Thr	Asp	140	145	150	
Leu	Leu	Lys	Ala	Arg	Asn	Ser	Pro	Asp	Leu	Asp	Arg	Val	Glu	Asp	155	160	165	
Pro	Ala	Asp	Ser	Ala	Ser	Phe	Phe	Pro	Asp	Leu	Val	Trp	Thr	Leu	170	175	180	

Arg	Asp	Phe	Cys	Leu	Gly	Leu	Glu	Ile	Asp	Gly	Gln	Leu	Val	Thr	185	190	195
Pro	Asp	Glu	Tyr	Leu	Glu	Asn	Ser	Leu	Arg	Pro	Lys	Gln	Gly	Ser	200	205	210
Asp	Gln	Arg	Val	Gln	Asn	Phe	Asn	Leu	Pro	Arg	Leu	Cys	Ile	Gln	215	220	225
Lys	Phe	Phe	Pro	Lys	Lys	Lys	Cys	Phe	Ile	Phe	Asp	Leu	Pro	Ala	230	235	240
His	Gln	Lys	Lys	Leu	Ala	Gln	Leu	Glu	Thr	Leu	Pro	Asp	Asp	Glu	245	250	255
Leu	Glu	Pro	Glu	Phe	Val	Gln	Gln	Val	Thr	Glu	Phe	Cys	Ser	Tyr	260	265	270
Ile	Phe	Ser	His	Ser	Met	Thr	Lys	Thr	Leu	Pro	Gly	Gly	Ile	Met	275	280	285
Val	Asn	Gly	Ser	Arg	Leu	Lys	Asn	Leu	Val	Leu	Thr	Tyr	Val	Asn	290	295	300
Ala	Ile	Ser	Ser	Gly	Asp	Leu	Pro	Cys	Ile	Glu	Asn	Ala	Val	Leu	305	310	315
Ala	Leu	Ala	Gln	Arg	Glu	Asn	Ser	Ala	Ala	Val	Gln	Lys	Ala	Ile	320	325	330
Ala	His	Tyr	Asp	Gln	Gln	Met	Gly	Gln	Lys	Val	Gln	Leu	Pro	Met	335	340	345
Glu	Thr	Leu	Gln	Glu	Leu	Leu	Asp	Leu	His	Arg	Thr	Ser	Glu	Arg	350	355	360
Glu	Ala	Ile	Glu	Val	Phe	Met	Lys	Asn	Ser	Phe	Lys	Asp	Val	Asp	365	370	375
Gln	Ser	Phe	Gln	Lys	Glu	Leu	Glu	Thr	Leu	Leu	Asp	Ala	Lys	Gln	380	385	390
Asn	Asp	Ile	Cys	Lys	Arg	Asn	Leu	Glu	Ala	Ser	Ser	Asp	Tyr	Cys	395	400	405
Ser	Ala	Leu	Leu	Lys	Asp	Ile	Phe	Gly	Pro	Leu	Glu	Glu	Ala	Val	410	415	420
Lys	Gln	Gly	Ile	Tyr	Ser	Lys	Pro	Gly	Gly	His	Asn	Leu	Phe	Ile	425	430	435
Gln	Lys	Thr	Glu	Glu	Leu	Lys	Ala	Lys	Tyr	Tyr	Arg	Glu	Pro	Arg	440	445	450
Lys	Gly	Ile	Gln	Ala	Glu	Glu	Val	Leu	Gln	Lys	Tyr	Leu	Lys	Ser	455	460	465
Lys	Glu	Ser	Val	Ser	His	Ala	Ile	Leu	Gln	Thr	Asp	Gln	Ala	Leu			

470	475	480
Thr Glu Thr Glu Lys Lys Lys Lys Glu	Ala Gln Val Lys Ala Glu	
485	490	495
Ala Glu Lys Ala Glu Ala Gln Arg Leu	Ala Ala Ile Gln Arg Gln	
500	505	510
Asn Glu Gln Met Met Gln Glu Arg Glu	Arg Leu His Gln Glu Gln	
515	520	525
Val Arg Gln Met Glu Ile Ala Lys Gln	Asn Trp Leu Ala Glu Gln	
530	535	540
Gln Lys Met Gln Glu Gln Gln Met Gln	Glu Gln Ala Ala Gln Leu	
545	550	555
Ser Thr Thr Phe Gln Ala Gln Asn Arg	Ser Leu Leu Ser Glu Leu	
560	565	570
Gln His Ala Gln Arg Ala Val Asn Asn	Asp Asp Pro Cys Val Leu	
575	580	585

Leu

<210> 47
 <211> 1808
 <212> DNA
 <213> Homo Sapien

<400> 47
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 tcctacattt tagacatttg tttgtttctc ttggtagcct ttaaattcct 150
 tgaagcccag gaccatgtct cacttacctt tgtgtttcca ctaactagtc 200
 tacctcctgg aattggcaga tactcagtga aagcctgtga aataagtgat 250
 gtctattttct agcatattat tctgagattt aatgatagat ttagtgattg 300
 aatgagattt ccattttcaa atacagcaaa agcataacta ttttcattca 350
 ttcatattca ttcaacttca ttctcaaaat taggtcctga gttaactaat 400
 aattaccttt gaaatgtgtg gggtatttga ggcaatcagg tggtagacatt 450
 gagctctcag ccagagtttg tttctggaat tgattcagtt ccattgcatt 500
 gatttttggt ctcagaagcc aaggtttccc atgaaaaatc attcccactt 550
 gaattgggct gtgattcttg ctgcgtttaa gttaaaggaag cctcttggtt 600
 ctagtctctgc aaacttacac actgaactgg gacaagtttt tgttttagagt 650

aatggctggg aaaagaggaa cctttcattt tattcagaag tcaaaaacaa 700
 aggcctccca gccacctgga gatgttttgt tgcagacacc agcctggctc 750
 tgtctttatg cctaacaatt gagcatccag tcttctttgt gctgggacca 800
 ttgctcagct ctgcaagggg aaaagaggga gaaagccaga gctgccaggc 850
 ttcttgcaact ggggcccggg gagggttcct gggaagcagg tgctctctgg 900
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 tcaagcacc actgcttaga gggcccagat ttcttttcct tctttccctt 1050
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 aatgatttgc tttttgtttc tttcattcct atttccaccc cacatataca 1500
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 cttttctttt tactttttat tttgaagtaa ttatagaatc acagaaagtt 1800
 gcaaaaaa 1808

<210> 48

<211> 121

<212> PRT

<213> Homo Sapien

<400> 48

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Lys Gln Ala Ser Leu Pro Pro Trp Gly Leu Ser His Gly Arg Cys

	20		25		30
Gly Phe Leu Leu Tyr Met Glu Met Thr Leu Cys Ser His Arg Thr					
	35		40		45
Gln Ser Phe Ser Glu Leu Ser Gln Ser Leu Met Arg Pro Gly Phe					
	50		55		60
Leu Gln Met Pro Tyr Ile Ser Cys Ala Lys Leu Ser Lys Ile Trp					
	65		70		75
Phe Pro Ala Ser Lys Pro Cys Leu Leu Ala Phe Leu Glu Val Phe					
	80		85		90
Leu Leu Met Ser Arg Leu Ser Leu Phe Ser Lys Met Ile Cys Phe					
	95		100		105
Leu Phe Leu Ser Phe Leu Phe Pro Pro His Ile Tyr Thr His Ala					
	110		115		120

Ser

<210> 49
 <211> 3719
 <212> DNA
 <213> Homo Sapien

<400> 49
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 ccagtgagtg ccgggggtcc cagtttggtt gttgctatga caacgtggcc 100
 actgcagccg gtcctcttgg ggaaggctgt gtgggcccagc ccagccatgc 150
 ctaccccggtg cgggtgcctgc tgcccagtgc ccatggctct tgtgcagact 200
 gggctgcccc ctggtacttc gttgcctctg tgggccaatg taaccgcttc 250
 tggatatggcg gctgccatgg caatgccaat aactttgcct cggagcaaga 300
 gtgcatgagc agctgccagg gatctctcca tgggccccgt cgtccccagc 350
 ctggggcttc tggaaggagc acccacacgg atggtggcgg cagcagtcct 400
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<211> 477

<212> PRT

<213> Homo Sapien

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Arg	His	Pro	Ser	Thr	Ala	Pro	Pro	Thr	Asp	Leu	Thr	Ser	His	Leu
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<211> 323

<212> PRT

<213> Homo Sapien

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<210> 56

<211> 525

<212> PRT

<213> Homo Sapien

<400> 56

Met	Gly	Trp	Leu	Phe	Leu	Lys	Val	Leu	Leu	Ala	Gly	Val	Ser	Phe
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Ser	Gly	Phe	Leu	Tyr	Pro	Leu	Val	Asp	Phe	Cys	Ile	Ser	Gly	Lys
				20					25					30
Thr	Arg	Gly	Gln	Lys	Pro	Asn	Phe	Val	Ile	Ile	Leu	Ala	Asp	Asp
				35					40					45

Met	Gly	Trp	Gly	Asp 50	Leu	Gly	Ala	Asn	Trp 55	Ala	Glu	Thr	Lys	Asp 60
Thr	Ala	Asn	Leu	Asp 65	Lys	Met	Ala	Ser	Glu 70	Gly	Met	Arg	Phe	Val 75
Asp	Phe	His	Ala	Ala 80	Ala	Ser	Thr	Cys	Ser 85	Pro	Ser	Arg	Ala	Ser 90
Leu	Leu	Thr	Gly	Arg 95	Leu	Gly	Leu	Arg	Asn 100	Gly	Val	Thr	Arg	Asn 105
Phe	Ala	Val	Thr	Ser 110	Val	Gly	Gly	Leu	Pro 115	Leu	Asn	Glu	Thr	Thr 120
Leu	Ala	Glu	Val	Leu 125	Gln	Gln	Ala	Gly	Tyr 130	Val	Thr	Gly	Ile	Ile 135
Gly	Lys	Trp	His	Leu 140	Gly	His	His	Gly	Ser 145	Tyr	His	Pro	Asn	Phe 150
Arg	Gly	Phe	Asp	Tyr 155	Tyr	Phe	Gly	Ile	Pro 160	Tyr	Ser	His	Asp	Met 165
Gly	Cys	Thr	Asp	Thr 170	Pro	Gly	Tyr	Asn	His 175	Pro	Pro	Cys	Pro	Ala 180
Cys	Pro	Gln	Gly	Asp 185	Gly	Pro	Ser	Arg	Asn 190	Leu	Gln	Arg	Asp	Cys 195
Tyr	Thr	Asp	Val	Ala 200	Leu	Pro	Leu	Tyr	Glu 205	Asn	Leu	Asn	Ile	Val 210
Glu	Gln	Pro	Val	Asn 215	Leu	Ser	Ser	Leu	Ala 220	Gln	Lys	Tyr	Ala	Glu 225
Lys	Ala	Thr	Gln	Phe 230	Ile	Gln	Arg	Ala	Ser 235	Thr	Ser	Gly	Arg	Pro 240
Phe	Leu	Leu	Tyr	Val 245	Ala	Leu	Ala	His	Met 250	His	Val	Pro	Leu	Pro 255
Val	Thr	Gln	Leu	Pro 260	Ala	Ala	Pro	Arg	Gly 265	Arg	Ser	Leu	Tyr	Gly 270
Ala	Gly	Leu	Trp	Glu 275	Met	Asp	Ser	Leu	Val 280	Gly	Gln	Ile	Lys	Asp 285
Lys	Val	Asp	His	Thr 290	Val	Lys	Glu	Asn	Thr 295	Phe	Leu	Trp	Phe	Thr 300
Gly	Asp	Asn	Gly	Pro 305	Trp	Ala	Gln	Lys	Cys 310	Glu	Leu	Ala	Gly	Ser 315
Val	Gly	Pro	Phe	Thr 320	Gly	Phe	Trp	Gln	Thr 325	Arg	Gln	Gly	Gly	Ser 330
Pro	Ala	Lys	Gln	Thr	Thr	Trp	Glu	Gly	Gly	His	Arg	Val	Pro	Ala

335	340	345
Leu Ala Tyr Trp	Pro Gly Arg Val Pro Val Asn Val Thr Ser Thr	
350	355	360
Ala Leu Leu Ser	Val Leu Asp Ile Phe Pro Thr Val Val Ala Leu	
365	370	375
Ala Gln Ala Ser	Leu Pro Gln Gly Arg Arg Phe Asp Gly Val Asp	
380	385	390
Val Ser Glu Val	Leu Phe Gly Arg Ser Gln Pro Gly His Arg Val	
395	400	405
Leu Phe His Pro	Asn Ser Gly Ala Ala Gly Glu Phe Gly Ala Leu	
410	415	420
Gln Thr Val Arg	Leu Glu Arg Tyr Lys Ala Phe Tyr Ile Thr Gly	
425	430	435
Gly Ala Arg Ala	Cys Asp Gly Ser Met Val Pro Glu Leu Gln His	
440	445	450
Lys Phe Pro Leu	Ile Phe Asn Leu Glu Asp Asp Thr Ala Glu Ala	
455	460	465
Val Pro Leu Glu	Arg Gly Gly Ala Glu Tyr Gln Ala Val Leu Pro	
470	475	480
Glu Val Arg Lys	Val Leu Ala Asp Val Leu Gln Asp Ile Ala Asn	
485	490	495
Asp Asn Ile Ser	Ser Ala Asp Tyr Thr Gln Asp Pro Ser Val Thr	
500	505	510
Pro Cys Cys Asn	Pro Tyr Gln Ile Ala Cys Arg Cys Gln Ala Ala	
515	520	525

<210> 57
 <211> 2443
 <212> DNA
 <213> Homo Sapien

<400> 57
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<210> 58

<211> 486

<212> PRT

<213> Homo Sapien

<400> 58

Met	Val	Arg	His	Gln	Pro	Leu	Gln	Tyr	Tyr	Glu	Pro	Gln	Leu	Cys
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Leu	Ser	Cys	Leu	Thr	Gly	Ile	Tyr	Gly	Cys	Arg	Trp	Lys	Arg	Tyr
			20						25					30
Gln	Arg	Ser	His	Asp	Asp	Thr	Thr	Pro	Gly	Thr	Ala	Pro	Phe	Leu
			35						40					45
His	Val	Gly	Ala	Val	Ala	Ala	Val	Thr	Met	Leu	Ser	Trp	Ile	Val
			50						55					60
Ala	Gly	Gln	Phe	Ala	Arg	Ala	Glu	Arg	Thr	Ser	Ser	Gln	Val	Thr
			65						70					75
Ile	Leu	Cys	Thr	Phe	Phe	Thr	Val	Val	Phe	Ala	Leu	Tyr	Leu	Ala
			80						85					90
Pro	Leu	Thr	Ile	Ser	Ser	Pro	Cys	Ile	Met	Glu	Lys	Lys	Asp	Leu
			95						100					105
Gly	Pro	Lys	Pro	Ala	Leu	Ile	Gly	His	Arg	Gly	Ala	Pro	Met	Leu
			110						115					120
Ala	Pro	Glu	His	Thr	Leu	Met	Ser	Phe	Arg	Lys	Ala	Leu	Glu	Gln
			125						130					135

Lys Leu Tyr Gly Leu Gln Ala Asp Ile Thr Ile Ser Leu Asp Gly
140 145 150

Val Pro Phe Leu Met His Asp Thr Thr Leu Arg Arg Thr Thr Asn
155 160 165

Val Glu Glu Glu Phe Pro Glu Leu Ala Arg Arg Pro Ala Ser Met
170 175 180

Leu Asn Trp Thr Thr Leu Gln Arg Leu Asn Ala Gly Gln Trp Phe
185 190 195

Leu Lys Thr Asp Pro Phe Trp Thr Ala Ser Ser Leu Ser Pro Ser
200 205 210

Asp His Arg Glu Ala Gln Asn Gln Ser Ile Cys Ser Leu Ala Glu
215 220 225

Leu Leu Glu Leu Ala Lys Gly Asn Ala Thr Leu Leu Leu Asn Leu
230 235 240

Arg Asp Pro Pro Arg Glu His Pro Tyr Arg Ser Ser Phe Ile Asn
245 250 255

Val Thr Leu Glu Ala Val Leu His Ser Gly Phe Pro Gln His Gln
260 265 270

Val Met Trp Leu Pro Ser Arg Gln Arg Pro Leu Val Arg Lys Val
275 280 285

Ala Pro Gly Phe Gln Gln Thr Ser Gly Ser Lys Glu Ala Val Ala
290 295 300

Ser Leu Arg Arg Gly His Ile Gln Arg Leu Asn Leu Arg Tyr Thr
305 310 315

Gln Val Ser Arg Gln Glu Leu Arg Asp Tyr Ala Ser Trp Asn Leu
320 325 330

Ser Val Asn Leu Tyr Thr Val Asn Ala Pro Trp Leu Phe Ser Leu
335 340 345

Leu Trp Cys Ala Gly Val Pro Ser Val Thr Ser Asp Asn Ser His
350 355 360

Thr Leu Ser Gln Val Pro Ser Pro Leu Trp Ile Met Pro Pro Asp
365 370 375

Glu Tyr Cys Leu Met Trp Val Thr Ala Asp Leu Val Ser Phe Thr
380 385 390

Leu Ile Val Gly Ile Phe Val Leu Gln Lys Trp Arg Leu Gly Gly
395 400 405

Ile Arg Ser Tyr Asn Pro Glu Gln Ile Met Leu Ser Ala Ala Val
410 415 420

Arg Arg Thr Ser Arg Asp Val Ser Ile Met Lys Glu Lys Leu Ile

425	430	435
Phe Ser Glu Ile Ser Asp Gly Val Glu Val Ser Asp Val Leu Ser		
440	445	450
Val Cys Ser Asp Asn Ser Tyr Asp Thr Tyr Ala Asn Ser Thr Ala		
455	460	465
Thr Pro Val Gly Pro Arg Gly Gly Gly Ser His Thr Lys Thr Leu		
470	475	480
Ile Glu Arg Ser Gly Arg		
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<210> 59
 <211> 2550
 <212> DNA
 <213> Homo Sapien

<400> 59
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<210> 60
 <211> 724
 <212> PRT
 <213> Homo Sapien

<400> 60
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 20 25 30
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 35 40 45
 Leu Asp Tyr Gly Pro Pro Phe Gln Pro Pro Leu His Leu Glu Phe
 50 55 60
 Cys Ser Asp Tyr Glu Ser Phe Gly Cys Cys Asp Gln His Lys Asp
 65 70 75
 Arg Arg Ile Ala Ala Arg Tyr Trp Asp Ile Met Glu Tyr Phe Asp
 80 85 90
 Leu Lys Arg His Glu Leu Cys Gly Asp Tyr Ile Lys Asp Ile Leu
 95 100 105
 Cys Gln Glu Cys Ser Pro Tyr Ala Ala His Leu Tyr Asp Ala Glu
 110 115 120
 Asn Thr Gln Thr Pro Leu Arg Asn Leu Pro Gly Leu Cys Ser Asp
 125 130 135
 Tyr Cys Ser Ala Phe His Ser Asn Cys His Ser Ala Ile Ser Leu
 140 145 150
 Leu Thr Asn Asp Arg Gly Leu Gln Glu Ser His Gly Arg Asp Gly
 155 160 165
 Thr Arg Phe Cys His Leu Leu Asp Leu Pro Asp Lys Asp Tyr Cys
 170 175 180
 Phe Pro Asn Val Leu Arg Asn Asp Tyr Leu Asn Arg His Leu Gly
 185 190 195
 Met Val Ala Gln Asp Pro Gln Gly Cys Leu Gln Leu Cys Leu Ser
 200 205 210
 Glu Val Ala Asn Gly Leu Arg Asn Pro Val Ser Met Val His Ala
 215 220 225
 Gly Asp Gly Thr His Arg Phe Phe Val Ala Glu Gln Val Gly Val

Gly Arg Leu Met	Ala Leu Gln Glu Asp	Arg Lys Asn Lys Lys Trp
530	535	540
Lys Lys Gln Asp	Leu Cys Leu Gly Ser	Thr Thr Ser Cys Ala Phe
545	550	555
Pro Gly Leu Ile	Ser Thr His Ser Lys	Phe Ile Ile Ser Phe Ala
560	565	570
Glu Asp Glu Ala	Gly Glu Leu Tyr Phe	Leu Ala Thr Ser Tyr Pro
575	580	585
Ser Ala Tyr Ala	Pro Arg Gly Ser Ile	Tyr Lys Phe Val Asp Pro
590	595	600
Ser Arg Arg Ala	Pro Pro Gly Lys Cys	Lys Tyr Lys Pro Val Pro
605	610	615
Val Arg Thr Lys	Ser Lys Arg Ile Pro	Phe Arg Pro Leu Ala Lys
620	625	630
Thr Val Leu Asp	Leu Leu Lys Glu Gln	Ser Glu Lys Ala Ala Arg
635	640	645
Lys Ser Ser Ser	Ala Thr Leu Ala Ser	Gly Pro Ala Gln Gly Leu
650	655	660
Ser Glu Lys Gly	Ser Ser Lys Lys Leu	Ala Ser Pro Thr Ser Ser
665	670	675
Lys Asn Thr Leu	Arg Gly Pro Gly Thr	Lys Lys Lys Ala Arg Val
680	685	690
Gly Pro His Val	Arg Gln Gly Lys Arg	Arg Lys Ser Leu Lys Ser
695	700	705
His Ser Gly Arg	Met Arg Pro Ser Ala	Glu Gln Lys Arg Ala Gly
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Arg Ser Leu Pro		

<210> 61
 <211> 2119
 <212> DNA
 <213> Homo Sapien

<400> 61
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<210> 62
<211> 95
<212> PRT
<213> Homo Sapien

<400> 62
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Gln Val Ile Pro Ala Ser Ala Gly Gly Ser Lys Cys Val Ser Asn
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Thr Pro Gly Tyr Cys Arg Thr Cys Cys His Trp Gly Glu Thr Ala
35 40 45
Leu Phe Met Cys Asn Ala Ser Arg Lys Cys Cys Ile Ser Tyr Ser
50 55 60
Phe Leu Pro Lys Pro Asp Leu Pro Gln Leu Ile Gly Asn His Trp
65 70 75
Gln Ser Arg Arg Arg Asn Thr Gln Arg Lys Asp Lys Lys Gln Gln
80 85 90
Thr Thr Val Thr Ser
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<210> 63
<211> 2623
<212> DNA
<213> Homo Sapien

<400> 63
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 agcctaataaa aaaaaaaaaa aaa 2623

<210> 64
 <211> 504
 <212> PRT
 <213> Homo Sapien

<400> 64
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 20 25 30
 His Leu Pro Pro Gly Pro Thr Pro Leu Pro Leu Leu Gly Asn Leu
 35 40 45
 Leu Gln Leu Arg Pro Gly Ala Leu Tyr Ser Gly Leu Met Arg Leu
 50 55 60

Ser Lys Lys Tyr Gly Pro Val Phe Thr Ile Tyr Leu Gly Pro Trp
 65 70 75
 Arg Pro Val Val Val Leu Val Gly Gln Glu Ala Val Arg Glu Ala
 80 85 90
 Leu Gly Gly Gln Ala Glu Glu Phe Ser Gly Arg Gly Thr Val Ala
 95 100 105
 Met Leu Glu Gly Thr Phe Asp Gly His Gly Val Phe Phe Ser Asn
 110 115 120
 Gly Glu Arg Trp Arg Gln Leu Arg Lys Phe Thr Met Leu Ala Leu
 125 130 135
 Arg Asp Leu Gly Met Gly Lys Arg Glu Gly Glu Glu Leu Ile Gln
 140 145 150
 Ala Glu Ala Arg Cys Leu Val Glu Thr Phe Gln Gly Thr Glu Gly
 155 160 165
 Arg Pro Phe Asp Pro Ser Leu Leu Leu Ala Gln Ala Thr Ser Asn
 170 175 180
 Val Val Cys Ser Leu Leu Phe Gly Leu Arg Phe Ser Tyr Glu Asp
 185 190 195
 Lys Glu Phe Gln Ala Val Val Arg Ala Ala Gly Gly Thr Leu Leu
 200 205 210
 Gly Val Ser Ser Gln Gly Gly Gln Thr Tyr Glu Met Phe Ser Trp
 215 220 225
 Phe Leu Arg Pro Leu Pro Gly Pro His Lys Gln Leu Leu His His
 230 235 240
 Val Ser Thr Leu Ala Ala Phe Thr Val Arg Gln Val Gln Gln His
 245 250 255
 Gln Gly Asn Leu Asp Ala Ser Gly Pro Ala Arg Asp Leu Val Asp
 260 265 270
 Ala Phe Leu Leu Lys Met Ala Gln Glu Glu Gln Asn Pro Gly Thr
 275 280 285
 Glu Phe Thr Asn Lys Asn Met Leu Met Thr Val Ile Tyr Leu Leu
 290 295 300
 Phe Ala Gly Thr Met Thr Val Ser Thr Thr Val Gly Tyr Thr Leu
 305 310 315
 Leu Leu Leu Met Lys Tyr Pro His Val Gln Lys Trp Val Arg Glu
 320 325 330
 Glu Leu Asn Arg Glu Leu Gly Ala Gly Gln Ala Pro Ser Leu Gly
 335 340 345
 Asp Arg Thr Arg Leu Pro Tyr Thr Asp Ala Val Leu His Glu Ala

350	355	360
Gln Arg Leu Leu Ala Leu Val Pro Met Gly Ile Pro Arg Thr Leu		
365	370	375
Met Arg Thr Thr Arg Phe Arg Gly Tyr Thr Leu Pro Gln Gly Thr		
380	385	390
Glu Val Phe Pro Leu Leu Gly Ser Ile Leu His Asp Pro Asn Ile		
395	400	405
Phe Lys His Pro Glu Glu Phe Asn Pro Asp Arg Phe Leu Asp Ala		
410	415	420
Asp Gly Arg Phe Arg Lys His Glu Ala Phe Leu Pro Phe Ser Leu		
425	430	435
Gly Lys Arg Val Cys Leu Gly Glu Gly Leu Ala Lys Ala Glu Leu		
440	445	450
Phe Leu Phe Phe Thr Thr Ile Leu Gln Ala Phe Ser Leu Glu Ser		
455	460	465
Pro Cys Pro Pro Asp Thr Leu Ser Leu Lys Pro Thr Val Ser Gly		
470	475	480
Leu Phe Asn Ile Pro Pro Ala Phe Gln Leu Gln Val Arg Pro Thr		
485	490	495
Asp Leu His Ser Thr Thr Gln Thr Arg		
500		

<210> 65
 <211> 1606
 <212> DNA
 <213> Homo Sapien

<400> 65
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 tcatccctaa ctggctgggc cccctgcaga acctgcttca tatacgggca 200
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 gaccatatcc tccatactcc ttggccgatt tctcttgga caacatcact 500

gattcattgg atcctgccac cctgagtgcc acatttcaag gccaccccat 550
gaacgaccct accaggactt ttgccaatgg cagcctggcc ttcagggtcc 600
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ccggccgtct tccagttgga ccagctactg tggggctccc tcccatcagg 850
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<210> 66

<211> 406

<212> PRT

<213> Homo Sapien

<400> 66

Met	Arg	Gly	Ser	Val	Glu	Cys	Thr	Trp	Gly	Trp	Gly	His	Cys	Ala
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Pro	Ser	Pro	Leu	Leu	Leu	Trp	Thr	Leu	Leu	Leu	Phe	Ala	Ala	Pro
			20					25						30

Phe Gly Leu Leu Gly Glu Lys Thr Arg Gln Val Ser Leu Glu Val	35	40	45
Ile Pro Asn Trp Leu Gly Pro Leu Gln Asn Leu Leu His Ile Arg	50	55	60
Ala Val Gly Thr Asn Ser Thr Leu His Tyr Val Trp Ser Ser Leu	65	70	75
Gly Pro Leu Ala Val Val Met Val Ala Thr Asn Thr Pro His Ser	80	85	90
Thr Leu Ser Ile Asn Trp Ser Leu Leu Leu Ser Pro Glu Pro Asp	95	100	105
Gly Gly Leu Met Val Leu Pro Lys Asp Ser Ile Gln Phe Ser Ser	110	115	120
Ala Leu Val Phe Thr Arg Leu Leu Glu Phe Asp Ser Thr Asn Val	125	130	135
Ser Asp Thr Ala Ala Lys Pro Leu Gly Arg Pro Tyr Pro Pro Tyr	140	145	150
Ser Leu Ala Asp Phe Ser Trp Asn Asn Ile Thr Asp Ser Leu Asp	155	160	165
Pro Ala Thr Leu Ser Ala Thr Phe Gln Gly His Pro Met Asn Asp	170	175	180
Pro Thr Arg Thr Phe Ala Asn Gly Ser Leu Ala Phe Arg Val Gln	185	190	195
Ala Phe Ser Arg Ser Ser Arg Pro Ala Gln Pro Pro Arg Leu Leu	200	205	210
His Thr Ala Asp Thr Cys Gln Leu Glu Val Ala Leu Ile Gly Ala	215	220	225
Ser Pro Arg Gly Asn Arg Ser Leu Phe Gly Leu Glu Val Ala Thr	230	235	240
Leu Gly Gln Gly Pro Asp Cys Pro Ser Met Gln Glu Gln His Ser	245	250	255
Ile Asp Asp Glu Tyr Ala Pro Ala Val Phe Gln Leu Asp Gln Leu	260	265	270
Leu Trp Gly Ser Leu Pro Ser Gly Phe Ala Gln Trp Arg Pro Val	275	280	285
Ala Tyr Ser Gln Lys Pro Gly Gly Arg Glu Ser Ala Leu Pro Cys	290	295	300
Gln Ala Ser Pro Leu His Pro Ala Leu Ala Tyr Ser Leu Pro Gln	305	310	315
Ser Pro Ile Val Arg Ala Phe Phe Gly Ser Gln Asn Asn Phe Cys			

	320		325		330
Ala Phe Asn Leu Thr Phe Gly Ala Ser Thr Gly Pro Gly Tyr Trp					
	335		340		345
Asp Gln His Tyr Leu Ser Trp Ser Met Leu Leu Gly Val Gly Phe					
	350		355		360
Pro Pro Val Asp Gly Leu Ser Pro Leu Val Leu Gly Ile Met Ala					
	365		370		375
Val Ala Leu Gly Ala Pro Gly Leu Met Leu Leu Gly Gly Gly Leu					
	380		385		390
Val Leu Leu Leu His His Lys Lys Tyr Ser Glu Tyr Gln Ser Ile					
	395		400		405

Asn

<210> 67
 <211> 4185
 <212> DNA
 <213> Homo Sapien

<400> 67
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gtctgtatgc agtcaataaa acaatcgatt tgaaa 4185

<210> 68

<211> 745

<212> PRT

<213> Homo Sapien

<400> 68

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Val	Ala	Gly	Ser	Cys	Pro	Glu	Pro	Cys	Ala	Cys	Val	Asp	Lys	Tyr
				20					25					30
Ala	His	Gln	Phe	Ala	Asp	Cys	Ala	Tyr	Lys	Glu	Leu	Arg	Glu	Val
				35					40					45
Pro	Glu	Gly	Leu	Pro	Ala	Asn	Val	Thr	Thr	Leu	Ser	Leu	Ser	Ala
				50					55					60
Asn	Lys	Ile	Thr	Val	Leu	Arg	Arg	Gly	Ala	Phe	Ala	Asp	Val	Thr
				65					70					75
Gln	Val	Thr	Ser	Leu	Trp	Leu	Ala	His	Asn	Glu	Val	Arg	Thr	Val
				80					85					90
Glu	Pro	Gly	Ala	Leu	Ala	Val	Leu	Ser	Gln	Leu	Lys	Asn	Leu	Asp
				95					100					105
Leu	Ser	His	Asn	Phe	Ile	Ser	Ser	Phe	Pro	Trp	Ser	Asp	Leu	Arg
				110					115					120
Asn	Leu	Ser	Ala	Leu	Gln	Leu	Leu	Lys	Met	Asn	His	Asn	Arg	Leu
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Gly	Ser	Leu	Pro	Arg	Asp	Ala	Leu	Gly	Ala	Leu	Pro	Asp	Leu	Arg
				140					145					150
Ser	Leu	Arg	Ile	Asn	Asn	Asn	Arg	Leu	Arg	Thr	Leu	Ala	Pro	Gly
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Thr	Phe	Asp	Ala	Leu	Ser	Ala	Leu	Ser	His	Leu	Gln	Leu	Tyr	His	
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Asn	Pro	Phe	His	Cys	Gly	Cys	Gly	Leu	Val	Trp	Leu	Gln	Ala	Trp	
				185					190					195	
Ala	Ala	Ser	Thr	Arg	Val	Ser	Leu	Pro	Glu	Pro	Asp	Ser	Ile	Ala	
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Cys	Ala	Ser	Pro	Pro	Ala	Leu	Gln	Gly	Val	Pro	Val	Tyr	Arg	Leu	
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Phe	Val	Leu	His	Cys	Ile	Ala	Asp	Gly	His	Pro	Thr	Pro	Arg	Leu	
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Gln	Trp	Gln	Leu	Gln	Ile	Pro	Gly	Gly	Thr	Val	Val	Leu	Glu	Pro	
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Pro	Val	Leu	Ser	Gly	Glu	Asp	Asp	Gly	Val	Gly	Ala	Glu	Glu	Gly	
				290					295					300	
Glu	Gly	Glu	Gly	Asp	Gly	Asp	Leu	Leu	Thr	Gln	Thr	Gln	Ala	Gln	
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Thr	Pro	Thr	Pro	Ala	Pro	Ala	Trp	Pro	Ala	Pro	Pro	Ala	Thr	Pro	
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Arg	Phe	Leu	Ala	Leu	Ala	Asn	Gly	Ser	Leu	Leu	Val	Pro	Leu	Leu	
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Ser	Ala	Lys	Glu	Ala	Gly	Val	Tyr	Thr	Cys	Arg	Ala	His	Asn	Glu	
				350					355					360	
Leu	Gly	Ala	Asn	Ser	Thr	Ser	Ile	Arg	Val	Ala	Val	Ala	Ala	Thr	
				365					370					375	
Gly	Pro	Pro	Lys	His	Ala	Pro	Gly	Ala	Gly	Gly	Glu	Pro	Asp	Gly	
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Gln	Ala	Pro	Thr	Ser	Glu	Arg	Lys	Ser	Thr	Ala	Lys	Gly	Arg	Gly	
				395					400					405	
Asn	Ser	Val	Leu	Pro	Ser	Lys	Pro	Glu	Gly	Lys	Ile	Lys	Gly	Gln	
				410					415					420	
Gly	Leu	Ala	Lys	Val	Ser	Ile	Leu	Gly	Glu	Thr	Glu	Thr	Glu	Pro	
				425					430					435	
Glu	Glu	Asp	Thr	Ser	Glu	Gly	Glu	Glu	Ala	Glu	Asp	Gln	Ile	Leu	
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<210> 69
<211> 2916
<212> DNA
<213> Homo Sapien

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<211> 625
<212> PRT
<213> Homo Sapien

<400> 70
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35 40 45
Thr Ile Arg Ala Glu Asp Gly Thr Leu Gln Cys Ile Gln Gly Pro
50 55 60
Ala Glu Val Pro Met Met Ser Pro Asn Gly Ser Ile Pro Pro Ile
65 70 75
His Val Pro Pro Gly Tyr Ile Ser Gln Val Ile Glu Asp Ser Thr
80 85 90
Gly Val Arg Arg Val Val Val Thr Pro Gln Ser Pro Glu Cys Tyr
95 100 105
Pro Pro Ser Tyr Pro Ser Ala Met Ser Pro Thr His His Leu Pro
110 115 120
Pro Tyr Leu Thr His His Pro His Phe Ile His Asn Ser His Thr
125 130 135
Ala Tyr Tyr Pro Pro Val Thr Gly Pro Gly Asp Met Pro Pro Gln
140 145 150
Phe Phe Pro Gln His His Leu Pro His Thr Ile Tyr Gly Glu Gln
155 160 165
Glu Ile Ile Pro Phe Tyr Gly Met Ser Ser Tyr Ile Thr Arg Glu
170 175 180
Asp Gln Tyr Ser Lys Pro Pro His Lys Lys Leu Lys Asp Arg Gln
185 190 195
Ile Asp Arg Gln Asn Arg Leu Asn Ser Pro Pro Ser Ser Ile Tyr
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Lys Ser Ser Cys Thr Thr Val Tyr Asn Gly Tyr Gly Lys Gly His
215 220 225

Ser Gly Gly Ser Gly Gly Gly Gly Ser Gly Ser Gly Pro Gly Ile	230	235	240
Lys Lys Thr Glu Arg Arg Ala Arg Ser Ser Pro Lys Ser Asn Asp	245	250	255
Ser Asp Leu Gln Glu Tyr Glu Leu Glu Val Lys Arg Val Gln Asp	260	265	270
Ile Leu Ser Gly Ile Glu Lys Pro Gln Val Ser Asn Ile Gln Ala	275	280	285
Arg Ala Val Val Leu Ser Trp Ala Pro Pro Val Gly Leu Ser Cys	290	295	300
Gly Pro His Ser Gly Leu Ser Phe Pro Tyr Ser Tyr Glu Val Ala	305	310	315
Leu Ser Asp Lys Gly Arg Asp Gly Lys Tyr Lys Ile Ile Tyr Ser	320	325	330
Gly Glu Glu Leu Glu Cys Asn Leu Lys Asp Leu Arg Pro Ala Thr	335	340	345
Asp Tyr His Val Arg Val Tyr Ala Met Tyr Asn Ser Val Lys Gly	350	355	360
Ser Cys Ser Glu Pro Val Ser Phe Thr Thr His Ser Cys Ala Pro	365	370	375
Glu Cys Pro Phe Pro Pro Lys Leu Ala His Arg Ser Lys Ser Ser	380	385	390
Leu Thr Leu Gln Trp Lys Ala Pro Ile Asp Asn Gly Ser Lys Ile	395	400	405
Thr Asn Tyr Leu Leu Glu Trp Asp Glu Gly Lys Arg Asn Ser Gly	410	415	420
Phe Arg Gln Cys Phe Phe Gly Ser Gln Lys His Cys Lys Leu Thr	425	430	435
Lys Leu Cys Pro Ala Met Gly Tyr Thr Phe Arg Leu Ala Ala Arg	440	445	450
Asn Asp Ile Gly Thr Ser Gly Tyr Ser Gln Glu Val Val Cys Tyr	455	460	465
Thr Leu Gly Asn Ile Pro Gln Met Pro Ser Ala Pro Arg Leu Val	470	475	480
Arg Ala Gly Ile Thr Trp Val Thr Leu Gln Trp Ser Lys Pro Glu	485	490	495
Gly Cys Ser Pro Glu Glu Val Ile Thr Tyr Thr Leu Glu Ile Gln	500	505	510
Glu Asp Glu Asn Asp Asn Leu Phe His Pro Lys Tyr Thr Gly Glu			

515	520	525
Asp Leu Thr Cys Thr Val Lys Asn Leu Lys Arg Ser Thr Gln Tyr		
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Lys Phe Arg Leu Thr Ala Ser Asn Thr Glu Gly Lys Ser Cys Pro		
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Ser Glu Val Leu Val Cys Thr Thr Ser Pro Asp Arg Pro Gly Pro		
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Pro Thr Arg Pro Leu Val Lys Gly Pro Val Thr Ser His Gly Phe		
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Ser Val Lys Trp Asp Pro Pro Lys Asp Asn Gly Gly Ser Glu Ile		
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620	625	

<210> 71
 <211> 3732
 <212> DNA
 <213> Homo Sapien

<400> 71
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<211> 555

<212> PRT

<213> Homo Sapien

<400> 72

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Asn Met Asn Asn Ala Gly Asp Lys Trp Ser Ala Phe Leu Lys Glu
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Gln Ser Thr Leu Ala Gln Met Tyr Pro Leu Gln Glu Ile Gln Asn
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95 100 105

Ser Val Leu Ser Glu Asp Lys Ser Lys Arg Leu Asn Thr Ile Leu
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Asn Thr Met Ser Thr Ile Tyr Ser Thr Gly Lys Val Cys Asn Pro
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155 160 165

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Tyr Glu Asp Tyr Gly Asp Tyr Trp Arg Gly Asp Tyr Glu Val Asn
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Gly Val Asp Gly Tyr Asp Tyr Ser Arg Gly Gln Leu Ile Glu Asp
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535

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<210> 73

<211> 2120

<212> DNA

<213> Homo Sapien

<400> 73

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<210> 74
 <211> 199
 <212> PRT
 <213> Homo Sapien

<400> 74
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 Ser His Ser Ala Gly His Ser Leu Ala Ser Glu Leu Val Glu Ser
 35 40 45
 His Asp Gly His Glu Glu Ile Ile Lys Val Tyr Leu Lys Gly Arg
 50 55 60
 Ser Gly Asp Lys Met Ile His Glu Lys Asn Ile Asn Gln Leu Lys
 65 70 75

Ser	Glu	Val	Gln	Tyr	Ile	Gln	Glu	Ala	Arg	Asn	Cys	Leu	Gln	Lys	80	85	90
Leu	Arg	Glu	Asp	Ile	Ser	Ser	Lys	Leu	Asp	Arg	Asn	Leu	Gly	Asp	95	100	105
Ser	Leu	His	Arg	Gln	Glu	Ile	Gln	Val	Val	Leu	Glu	Lys	Pro	Asn	110	115	120
Gly	Phe	Ser	Gln	Ser	Pro	Thr	Ala	Leu	Tyr	Ser	Ser	Pro	Pro	Glu	125	130	135
Val	Asp	Thr	Cys	Ile	Asn	Glu	Asp	Val	Glu	Ser	Leu	Arg	Lys	Thr	140	145	150
Val	Gln	Asp	Leu	Leu	Ala	Lys	Leu	Gln	Glu	Ala	Lys	Arg	Gln	His	155	160	165
Gln	Ser	Asp	Cys	Val	Ala	Phe	Glu	Val	Thr	Leu	Ser	Arg	Tyr	Gln	170	175	180
Arg	Glu	Ala	Glu	Gln	Ser	Asn	Val	Ala	Leu	Gln	Arg	Glu	Glu	Asp	185	190	195
Arg Cys Pro Glu																	

<210> 75
 <211> 3192
 <212> DNA
 <213> Homo Sapien

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 <222> 1428, 1431
 <223> unknown base

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Val	Asn	Glu	Thr	Val	Glu	Ser	Gly	Ser	Asp	Thr	Leu	Asp	Leu	Ala			
				20					25					30			
Glu	Cys	Lys	Leu	Val	Ser	Phe	Pro	Ile	Gly	Ile	Tyr	Lys	Val	Leu			
				35					40					45			
Arg	Asn	Val	Ser	Gly	Gln	Ile	His	Leu	Ile	Thr	Leu	Ala	Asn	Asn			
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Glu	Leu	Lys	Ser	Leu	Thr	Ser	Lys	Phe	Met	Thr	Thr	Phe	Ser	Gln			
				65					70					75			
Leu	Arg	Glu	Leu	His	Leu	Glu	Gly	Asn	Phe	Leu	His	Arg	Leu	Pro			
				80					85					90			
Ser	Glu	Val	Ser	Ala	Leu	Gln	His	Leu	Lys	Ala	Ile	Asp	Leu	Ser			
				95					100					105			
Arg	Asn	Gln	Phe	Gln	Asp	Phe	Pro	Glu	Gln	Leu	Thr	Ala	Leu	Pro			
				110					115					120			
Ala	Leu	Glu	Thr	Ile	Asn	Leu	Glu	Glu	Asn	Glu	Ile	Val	Asp	Val			
				125					130					135			
Pro	Val	Glu	Lys	Leu	Ala	Ala	Met	Pro	Ala	Leu	Arg	Ser	Ile	Asn			
				140					145					150			
Leu	Arg	Phe	Asn	Pro	Leu	Asn	Ala	Glu	Val	Arg	Val	Ile	Ala	Pro			
				155					160					165			
Pro	Leu	Ile	Lys	Phe	Asp	Met	Leu	Met	Ser	Pro	Glu	Gly	Ala	Arg			
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Ala	Pro	Leu	Pro														

<210> 77
 <211> 3567
 <212> DNA
 <213> Homo Sapien

<400> 77
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 tgtcccggcg tctccagcag atgcctgcag ccttcacct tctcaagcag 150
 ggtggtgtga gtgcgtgct ttccttcctc gcctggaccg gagccgtcgc 200
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<210> 78
 <211> 250
 <212> PRT
 <213> Homo Sapien

<400> 78
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 35 40 45
 Gln Ala Leu Phe Val Gln Phe Asn Asp Gln Phe Phe Trp Gly Gln
 50 55 60
 Leu Glu Ala Val Glu Val Lys Trp Ser Val Arg Met Thr Leu Cys
 65 70 75
 Ala Gly Ile Cys Ser Tyr Glu Gly Lys Gly Gly Met Cys Ser Ile
 80 85 90
 Arg Leu Ser Glu Pro Leu Leu Lys Leu Arg Pro Arg Lys Asp Leu
 95 100 105
 Val Glu Thr Leu Leu His Glu Met Ile His Ala Tyr Leu Phe Val
 110 115 120
 Thr Asn Asn Asp Lys Asp Arg Glu Gly His Gly Pro Glu Phe Cys
 125 130 135
 Lys His Met His Arg Ile Asn Ser Leu Thr Gly Ala Asn Ile Thr
 140 145 150
 Val Tyr His Thr Phe His Asp Glu Val Asp Glu Tyr Arg Arg His
 155 160 165
 Trp Trp Arg Cys Asn Gly Pro Cys Gln His Arg Pro Pro Tyr Tyr
 170 175 180
 Gly Tyr Val Lys Arg Ala Thr Asn Arg Glu Pro Ser Ala His Asp
 185 190 195
 Tyr Trp Trp Ala Glu His Gln Lys Thr Cys Gly Gly Thr Tyr Ile

	200		205		210
Lys Ile Lys Glu Pro Glu Asn Tyr Ser Lys Lys Gly Lys Gly Lys					
	215		220		225
Ala Lys Leu Gly Lys Glu Pro Val Leu Ala Ala Glu Asn Lys Gly					
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Thr Phe Val Tyr Ile Leu Leu Ile Phe Met					
	245		250		

<210> 79
 <211> 2714
 <212> DNA
 <213> Homo Sapien

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<210> 80

<211> 316

<212> PRT

<213> Homo Sapien

<400> 80

Met	Ala	Leu	Tyr	Glu	Val	Phe	Ser	His	Pro	Val	Glu	Arg	Ser	Tyr	1	5	10	15
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Ala	Ala	Leu	Thr	Tyr	Ile	Pro	Pro	Leu	Leu	Val	Ala	Phe	Arg	Ser	35	40	45	
His	Gly	Phe	Trp	Leu	Lys	Arg	Ser	Ser	Tyr	Glu	Glu	Gln	Pro	Thr	50	55	60	
Val	Arg	Phe	Gln	His	Gln	Val	Leu	Leu	Val	Ala	Leu	Leu	Gly	Pro	65	70	75	
Glu	Ser	Asp	Gly	Phe	Leu	Ala	Trp	Ser	Thr	Phe	Pro	Ala	Phe	Asn	80	85	90	
Arg	Leu	Gln	Gly	Asp	Arg	Leu	Arg	Val	Pro	Leu	Val	Ser	Thr	Arg	95	100	105	
Glu	Glu	Asp	Arg	Asn	Gln	Asp	Gly	Lys	Thr	Asp	Met	Leu	His	Phe	110	115	120	
Lys	Leu	Glu	Leu	Pro	Leu	Gln	Ser	Thr	Glu	His	Val	Leu	Gly	Val	125	130	135	
Gln	Leu	Ile	Leu	Thr	Phe	Ser	Tyr	Arg	Leu	His	Arg	Met	Ala	Thr	140	145	150	
Leu	Val	Met	Gln	Ser	Met	Ala	Phe	Leu	Gln	Ser	Ser	Phe	Pro	Val	155	160	165	
Pro	Gly	Ser	Gln	Leu	Tyr	Val	Asn	Gly	Asp	Leu	Arg	Leu	Gln	Gln	170	175	180	
Lys	Gln	Pro	Leu	Ser	Cys	Gly	Gly	Leu	Asp	Ala	Arg	Tyr	Asn	Ile	185	190	195	
Ser	Val	Ile	Asn	Gly	Thr	Ser	Pro	Phe	Ala	Tyr	Asp	Tyr	Asp	Leu	200	205	210	

Thr	His	Ile	Val	Ala	Ala	Tyr	Gln	Glu	Arg	Asn	Val	Thr	Thr	Val
				215					220					225
Leu	Asn	Asp	Pro	Asn	Pro	Ile	Trp	Leu	Val	Gly	Arg	Ala	Ala	Asp
				230					235					240
Ala	Pro	Phe	Val	Ile	Asn	Ala	Ile	Ile	Arg	Tyr	Pro	Val	Glu	Val
				245					250					255
Ile	Ser	Tyr	Gln	Pro	Gly	Phe	Trp	Glu	Met	Val	Lys	Phe	Ala	Trp
				260					265					270
Val	Gln	Tyr	Val	Ser	Ile	Leu	Leu	Ile	Phe	Leu	Trp	Val	Phe	Glu
				275					280					285
Arg	Ile	Lys	Ile	Phe	Val	Phe	Gln	Asn	Gln	Val	Val	Thr	Thr	Ile
				290					295					300
Pro	Val	Thr	Val	Thr	Pro	Arg	Gly	Asp	Leu	Cys	Lys	Glu	His	Leu
				305					310					315

Ser

<210> 81
 <211> 3233
 <212> DNA
 <213> Homo Sapien

<400> 81
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 ccagggggcca gctgggcagg agcctgggtc cgctgctgct gtccttggcg 100
 ttgggacaca cgtggacctt cagagaggag ccggaggacg gcgacagaga 150
 aatctgctca gagagcaaaa tcgcgacgac taaatacccg tgtctgaagt 200
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gattatttgt tcaataaact ggctgagctt agagagaggt gcagaattcc 2150

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<210> 82
 <211> 406
 <212> PRT
 <213> Homo Sapien

<400> 82
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 Leu Gly Arg Ser Leu Gly Pro Leu Leu Leu Leu Ala Leu Gly
 20 25 30
 His Thr Trp Thr Tyr Arg Glu Glu Pro Glu Asp Gly Asp Arg Glu
 35 40 45

Ile	Cys	Ser	Glu	Ser	Lys	Ile	Ala	Thr	Thr	Lys	Tyr	Pro	Cys	Leu	50	55	60
Lys	Ser	Ser	Gly	Glu	Leu	Thr	Thr	Cys	Tyr	Arg	Lys	Lys	Cys	Cys	65	70	75
Lys	Gly	Tyr	Lys	Phe	Val	Leu	Gly	Gln	Cys	Ile	Pro	Glu	Asp	Tyr	80	85	90
Asp	Val	Cys	Ala	Glu	Ala	Pro	Cys	Glu	Gln	Gln	Cys	Thr	Asp	Asn	95	100	105
Phe	Gly	Arg	Val	Leu	Cys	Thr	Cys	Tyr	Pro	Gly	Tyr	Arg	Tyr	Asp	110	115	120
Arg	Glu	Arg	His	Arg	Lys	Arg	Glu	Lys	Pro	Tyr	Cys	Leu	Asp	Ile	125	130	135
Asp	Glu	Cys	Ala	Ser	Ser	Asn	Gly	Thr	Leu	Cys	Ala	His	Ile	Cys	140	145	150
Ile	Asn	Thr	Leu	Gly	Ser	Tyr	Arg	Cys	Glu	Cys	Arg	Glu	Gly	Tyr	155	160	165
Ile	Arg	Glu	Asp	Asp	Gly	Lys	Thr	Cys	Thr	Arg	Gly	Asp	Lys	Tyr	170	175	180
Pro	Asn	Asp	Thr	Gly	His	Glu	Lys	Ser	Glu	Asn	Met	Val	Lys	Ala	185	190	195
Gly	Thr	Cys	Cys	Ala	Thr	Cys	Lys	Glu	Phe	Tyr	Gln	Met	Lys	Gln	200	205	210
Thr	Val	Leu	Gln	Leu	Lys	Gln	Lys	Ile	Ala	Leu	Leu	Pro	Asn	Asn	215	220	225
Ala	Ala	Asp	Leu	Gly	Lys	Tyr	Ile	Thr	Gly	Asp	Lys	Val	Leu	Ala	230	235	240
Ser	Asn	Thr	Tyr	Leu	Pro	Gly	Pro	Pro	Gly	Leu	Pro	Gly	Gly	Gln	245	250	255
Gly	Pro	Pro	Gly	Ser	Pro	Gly	Pro	Lys	Gly	Ser	Pro	Gly	Phe	Pro	260	265	270
Gly	Met	Pro	Gly	Pro	Pro	Gly	Gln	Pro	Gly	Pro	Arg	Gly	Ser	Met	275	280	285
Gly	Pro	Met	Gly	Pro	Ser	Pro	Asp	Leu	Ser	His	Ile	Lys	Gln	Gly	290	295	300
Arg	Arg	Gly	Pro	Val	Gly	Pro	Pro	Gly	Ala	Pro	Gly	Arg	Asp	Gly	305	310	315
Ser	Lys	Gly	Glu	Arg	Gly	Ala	Pro	Gly	Pro	Arg	Gly	Ser	Pro	Gly	320	325	330
Pro	Pro	Gly	Ser	Phe	Asp	Phe	Leu	Leu	Leu	Met	Leu	Ala	Asp	Ile			

335	340	345
Arg Asn Asp Ile Thr Glu Leu Gln Glu Lys Val Phe Gly His Arg		
350	355	360
Thr His Ser Ser Ala Glu Glu Phe Pro Leu Pro Gln Glu Phe Pro		
365	370	375
Ser Tyr Pro Glu Ala Met Asp Leu Gly Ser Gly Asp Asp His Pro		
380	385	390
Arg Arg Thr Glu Thr Arg Asp Leu Arg Ala Pro Arg Asp Phe Tyr		
395	400	405
Pro		

<210> 83
 <211> 443
 <212> DNA
 <213> Homo Sapien

<400> 83
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 acaggttgac tgtggtgagt tccaggaccc caaggtctac tgcactcggg 150
 aatctaacc acactgtggc tctgatggcc agacatatgg caataaatgt 200
 gccttctgta aggccatagt gaaaagtggg ggaaagatta gcctaaagca 250
 tcttgaaaa tgctgagtta aagccaatgt ttcttggtga cttgccagct 300
 tttgcagcct tcttttctca cttctgotta tacttttgct ggtggattcc 350
 tttaattcat aaagacatac ctactctgcc tgggtcttga ggagttcaat 400
 gtatgtctat ttctcttgat tcaattgtca ataaagtaca ttc 443

<210> 84
 <211> 80
 <212> PRT
 <213> Homo Sapien

<400> 84
 Met Lys Leu Ser Gly Met Phe Leu Leu Leu Ser Leu Ala Leu Phe
 1 5 10 15
 Cys Phe Leu Thr Gly Val Phe Ser Gln Gly Gly Gln Val Asp Cys
 20 25 30
 Gly Glu Phe Gln Asp Pro Lys Val Tyr Cys Thr Arg Glu Ser Asn
 35 40 45
 Pro His Cys Gly Ser Asp Gly Gln Thr Tyr Gly Asn Lys Cys Ala
 50 55 60

Phe Cys Lys Ala Ile Val Lys Ser Gly Gly Lys Ile Ser Leu Lys
65 70 75

His Pro Gly Lys Cys
80

<210> 85
<211> 2750
<212> DNA
<213> Homo Sapien

<400> 85
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aaccggacag ttccccaact ggggactctg gaaccacagc tcctaaatca 100
tcaaattctc aagctttttt tttccctctc ttctgtcccag ccattcccagt 150
cttcttcttc tttttttttt ttttaactta ttgttttttt cgctcctgtc 200
attatgaaag tggtcacgcc attcaatatt aagacttggg gggaattggg 250
gaaagaaaag aaagaatcta aaagaagaga agcgaccggg gcttttaagg 300
gtgtctaatt ttcaaaagag acgtctggga gtattttgct ctgggcgttt 350
ggagcaactt cgcgacacag ggagctcgcc cagcatggat gttccagggt 400
cacaggcgcc tttcttctga gaacgacctt ggccttgaac gtcagagccg 450
gggacgaagg ccccgaggag ctgctgcgag ctccgcgcgt tccttcgcgc 500
ccttcgcgc cgctcgcgc ggcgcggcc tccacccccg cgcgccgcct 550
cccaccagtc ccgatgcagg cgcggggccg ggggcccactc gggctgcggc 600
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tcctccctag gcatctccgt gcgtccggc agcgccaagg tggccttctc 850
cgccacgcgg agcaccaacc acgagccgtc cgagatgagc aaccgcacca 900
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cttcacgtg gtcaaagtgt ataacagaca aaccatccag gtcagtttaa 1050
tgagaatgg ctaccagtg atctcgccct ttgcaggaga ccaggatgtc 1100
accagagaag ctgctagcaa tggcgtgctg ctgctcatgg aaaggaaga 1150

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 caccctgaac ttactggaat tggacacctt gtttccaacc tccgtcagac 1350
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<210> 86
 <211> 224
 <212> PRT
 <213> Homo Sapien

<400> 86
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 Pro Gly Arg Arg Gly Ala Leu Arg Glu Pro Gly Gly Cys Gly Ser
 20 25 30
 Cys Leu Gly Val Ala Leu Ala Leu Leu Leu Leu Leu Pro Ala
 35 40 45
 Cys Cys Pro Val Arg Ala Gln Asn Asp Thr Glu Pro Ile Val Leu
 50 55 60
 Glu Gly Lys Cys Leu Val Val Cys Asp Ser Ser Pro Ser Ala Asp
 65 70 75
 Gly Ala Val Thr Ser Ser Leu Gly Ile Ser Val Arg Ser Gly Ser
 80 85 90
 Ala Lys Val Ala Phe Ser Ala Thr Arg Ser Thr Asn His Glu Pro
 95 100 105
 Ser Glu Met Ser Asn Arg Thr Met Thr Ile Tyr Phe Asp Gln Val
 110 115 120
 Leu Val Asn Ile Gly Asn His Phe Asp Leu Ala Ser Ser Ile Phe
 125 130 135
 Val Ala Pro Arg Lys Gly Ile Tyr Ser Phe Ser Phe His Val Val
 140 145 150
 Lys Val Tyr Asn Arg Gln Thr Ile Gln Val Ser Leu Met Gln Asn
 155 160 165
 Gly Tyr Pro Val Ile Ser Ala Phe Ala Gly Asp Gln Asp Val Thr
 170 175 180
 Arg Glu Ala Ala Ser Asn Gly Val Leu Leu Leu Met Glu Arg Glu
 185 190 195
 Asp Lys Val His Leu Lys Leu Glu Arg Gly Asn Leu Met Gly Gly
 200 205 210
 Trp Lys Tyr Ser Thr Phe Ser Gly Phe Leu Val Phe Pro Leu
 215 220

<210> 87

<211> 2159
<212> DNA
<213> Homo Sapien

<400> 87
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 gagagaaggc gccactgcgg ttacacagtg aaaagccaga gtgtcggata 2000
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 ttgtttaca 2159

<210> 88
 <211> 685
 <212> PRT
 <213> Homo Sapien

<400> 88
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 20 25 30
 Gln Leu Gln Leu Gln Glu Phe Ile Asn Glu Arg Gly Val Leu Ala
 35 40 45
 Ser Gly Arg Pro Cys Glu Pro Gly Cys Arg Thr Phe Phe Arg Val
 50 55 60
 Cys Leu Lys His Phe Gln Ala Val Val Ser Pro Gly Pro Cys Thr
 65 70 75
 Phe Gly Thr Val Ser Thr Pro Val Leu Gly Thr Asn Ser Phe Ala
 80 85 90

Arg Asn Glu Cys Val Ile Ala Thr Glu Val
680 685

<210> 89
<211> 1893
<212> DNA
<213> Homo Sapien

<400> 89
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tctacctgga gacttgactc ccgcgcgccc caaccctgct tatcccttga 100
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ccccacaccc accctcctgg ctcttcctgt ttttactcct ccttttcatt 200
cataacaaaa gctacagctc caggagccca gcgccgggct gtgacccaag 250
ccgagcgtgg aagaatgggg ttcctcggga ccggcacttg gattctggtg 300
ttagtgctcc cgattcaagc tttcccaaaa cctggaggaa gccaagacaa 350
atctctacat aatagagaat taagtgcaga aagacctttg aatgaacaga 400
ttgctgaagc agaagaagac aagattaaaa aaacatatcc tccagaaaac 450
aagccaggtc agagcaacta ttcttttggt gataacttga acctgctaaa 500
ggcaataaca gaaaaggaaa aaattgagaa agaaagacaa tctataagaa 550
gctccccact tgataataag ttgaatgtgg aagatgttga ttcaaccaag 600
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ccttatcaca gaaagccaag cacatacact ggaagatgaa gtagcagagg 850
ttttacaaaa attaatotca aaggaagcca acaattatga ggaggatccc 900
aataagccca caagctggac tgagaatcag gctggaaaaa taccagagaa 950
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 aaatTTTTTg acccaagggt tattagaaag tgctgaattt acagtagtta 1800
 acctttttaca agtgggttaaa acatagcttt cttcccgtaa aaactatctg 1850
 aaagtaaagt tgtatgtaag ctgaaaaaaa aaaaaaaaaa aaa 1893

<210> 90

<211> 468

<212> PRT

<213> Homo Sapien

<400> 90

Met	Gly	Phe	Leu	Gly	Thr	Gly	Thr	Trp	Ile	Leu	Val	Leu	Val	Leu	1	5	10	15
Pro	Ile	Gln	Ala	Phe	Pro	Lys	Pro	Gly	Gly	Ser	Gln	Asp	Lys	Ser	20	25	30	
Leu	His	Asn	Arg	Glu	Leu	Ser	Ala	Glu	Arg	Pro	Leu	Asn	Glu	Gln	35	40	45	
Ile	Ala	Glu	Ala	Glu	Glu	Asp	Lys	Ile	Lys	Lys	Thr	Tyr	Pro	Pro	50	55	60	
Glu	Asn	Lys	Pro	Gly	Gln	Ser	Asn	Tyr	Ser	Phe	Val	Asp	Asn	Leu	65	70	75	
Asn	Leu	Leu	Lys	Ala	Ile	Thr	Glu	Lys	Glu	Lys	Ile	Glu	Lys	Glu	80	85	90	
Arg	Gln	Ser	Ile	Arg	Ser	Ser	Pro	Leu	Asp	Asn	Lys	Leu	Asn	Val	95	100	105	
Glu	Asp	Val	Asp	Ser	Thr	Lys	Asn	Arg	Lys	Leu	Ile	Asp	Asp	Tyr	110	115	120	
Asp	Ser	Thr	Lys	Ser	Gly	Leu	Asp	His	Lys	Phe	Gln	Asp	Asp	Pro	125	130	135	

Asp Gly Leu His	Gln Leu Asp Gly Thr	Pro Leu Thr Ala Glu Asp	140	145	150
Ile Val His Lys	Ile Ala Ala Arg Ile	Tyr Glu Glu Asn Asp Arg	155	160	165
Ala Val Phe Asp	Lys Ile Val Ser Lys	Leu Leu Asn Leu Gly Leu	170	175	180
Ile Thr Glu Ser	Gln Ala His Thr Leu	Glu Asp Glu Val Ala Glu	185	190	195
Val Leu Gln Lys	Leu Ile Ser Lys Glu	Ala Asn Asn Tyr Glu Glu	200	205	210
Asp Pro Asn Lys	Pro Thr Ser Trp Thr	Glu Asn Gln Ala Gly Lys	215	220	225
Ile Pro Glu Lys	Val Thr Pro Met Ala	Ala Ile Gln Asp Gly Leu	230	235	240
Ala Lys Gly Glu	Asn Asp Glu Thr Val	Ser Asn Thr Leu Thr Leu	245	250	255
Thr Asn Gly Leu	Glu Arg Arg Thr Lys	Thr Tyr Ser Glu Asp Asn	260	265	270
Phe Glu Glu Leu	Gln Tyr Phe Pro Asn	Phe Tyr Ala Leu Leu Lys	275	280	285
Ser Ile Asp Ser	Glu Lys Glu Ala Lys	Glu Lys Glu Thr Leu Ile	290	295	300
Thr Ile Met Lys	Thr Leu Ile Asp Phe	Val Lys Met Met Val Lys	305	310	315
Tyr Gly Thr Ile	Ser Pro Glu Glu Gly	Val Ser Tyr Leu Glu Asn	320	325	330
Leu Asp Glu Met	Ile Ala Leu Gln Thr	Lys Asn Lys Leu Glu Lys	335	340	345
Asn Ala Thr Asp	Asn Ile Ser Lys Leu	Phe Pro Ala Pro Ser Glu	350	355	360
Lys Ser His Glu	Glu Thr Asp Ser Thr	Lys Glu Glu Ala Ala Lys	365	370	375
Met Glu Lys Glu	Tyr Gly Ser Leu Lys	Asp Ser Thr Lys Asp Asp	380	385	390
Asn Ser Asn Pro	Gly Gly Lys Thr Asp	Glu Pro Lys Gly Lys Thr	395	400	405
Glu Ala Tyr Leu	Glu Ala Ile Arg Lys	Asn Ile Glu Trp Leu Lys	410	415	420
Lys His Asp Lys	Lys Gly Asn Lys Glu	Asp Tyr Asp Leu Ser Lys			

	425		430		435
Met Arg Asp Phe Ile Asn Lys Gln Ala Asp Ala Tyr Val Glu Lys					
	440		445		450
Gly Ile Leu Asp Lys Glu Glu Ala Glu Ala Ile Lys Arg Ile Tyr					
	455		460		465
Ser Ser Leu					

<210> 91
 <211> 1240
 <212> DNA
 <213> Homo Sapien

<400> 91
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 tgggcctcac cctgctcttg ctgctgctcc tgggactaga aggtcagggc 100
 atagttggca gcctccctga ggtgctgcag gcacccgtgg gaagctccat 150
 tctggtgcag tgccactaca ggctccagga tgtcaaagct cagaaggtgt 200
 ggtgcccgggt cttgccggag gggtgccagc ccctgggtgtc ctcagctgtg 250
 gatcgcagag ctccagcggg caggcgtacg tttctcacag acctgggtgg 300
 gggcctgctg caggtggaaa tggttaccct gcaggaagag gatgctggcg 350
 agtatggctg catggtggat ggggccaggg ggccccagat tttgcacaga 400
 gtctctctga acatactgcc cccagaggaa gaagaagaga ccataagat 450
 tggcagtcctg gctgagaacg cattctcaga ccctgcaggc agtgccaacc 500
 ctttggaaacc cagccaggat gagaagagca tccccttgat ctgggggtgct 550
 gtgctcctgg taggtctgct ggtggcagcg gtggtgctgt ttgctgtgat 600
 ggccaagagg aaacaagaat ccctcctcag tggccacca cgtcagtgac 650
 tctggaccgg ctgctgaatt gcctttggat gtaccacaca ttaggcttga 700
 ctcaccacct tcatttgaca ataccaccta caccagccta cctcttgatt 750
 ccccatcagg aaaaccttca ctcccagctc catcctcatt gccccctcta 800
 cctcctaagg tcctggtctg ctccaagcct gtgacatatg ccacagtaat 850
 cttcccggga gggaacaagg gtggagggac ctcgtgtggg ccagcccaga 900
 atccacctaa caatcagact ccatccagct aagctgctca tcacacttta 950
 aactcatgag gaccatccct aggggttctg tgcattccatc cagccagctc 1000
 atgccttagg atccttagga tatctgagca accagggact ttaagatcta 1050

atccaatgtc ctaactttac tagggaaagt gacgctcaga catgactgag 1100
atgtcttggg gaagacctcc ctgcacccaa ctccccact gggtcttcta 1150
ccattacaca ctgggctaaa taaaccctaa taatgatgtg caaaaaaaaaa 1200
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 1240

<210> 92
<211> 199
<212> PRT
<213> Homo Sapien

<400> 92
Met Gly Leu Thr Leu Leu Leu Leu Leu Leu Leu Gly Leu Glu Gly
1 5 10 15
Gln Gly Ile Val Gly Ser Leu Pro Glu Val Leu Gln Ala Pro Val
20 25 30
Gly Ser Ser Ile Leu Val Gln Cys His Tyr Arg Leu Gln Asp Val
35 40 45
Lys Ala Gln Lys Val Trp Cys Arg Phe Leu Pro Glu Gly Cys Gln
50 55 60
Pro Leu Val Ser Ser Ala Val Asp Arg Arg Ala Pro Ala Gly Arg
65 70 75
Arg Thr Phe Leu Thr Asp Leu Gly Gly Gly Leu Leu Gln Val Glu
80 85 90
Met Val Thr Leu Gln Glu Glu Asp Ala Gly Glu Tyr Gly Cys Met
95 100 105
Val Asp Gly Ala Arg Gly Pro Gln Ile Leu His Arg Val Ser Leu
110 115 120
Asn Ile Leu Pro Pro Glu Glu Glu Glu Glu Thr His Lys Ile Gly
125 130 135
Ser Leu Ala Glu Asn Ala Phe Ser Asp Pro Ala Gly Ser Ala Asn
140 145 150
Pro Leu Glu Pro Ser Gln Asp Glu Lys Ser Ile Pro Leu Ile Trp
155 160 165
Gly Ala Val Leu Leu Val Gly Leu Leu Val Ala Ala Val Val Leu
170 175 180
Phe Ala Val Met Ala Lys Arg Lys Gln Glu Ser Leu Leu Ser Gly
185 190 195
Pro Pro Arg Gln

<210> 93
<211> 2285

<212> DNA
<213> Homo Sapien

<400> 93
ggcggcggttg cggggctctc cggaaggaga cgtggcgggc gttgggcccg 50
tgatacccgg gcgctttata gtcccggcg ctcctcctcc acctcctcct 100
cctcctcctc tctcctggg gcagaggagg ttgtggcggt ggctggagaa 150
agcggcgggc gaggatggag gaaggaggcg gcggcgtagc gagtctggtc 200
ccggggcgggc cgggtgttact ggtcctctgc ggcctcctgg aggcgtccgg 250
cggcgggccga gcccttctc aactcagcga tgacatccct ttccgagtca 300
actggcccgg caccgagttc tctctgccc caactggagt tttatataaa 350
gaagataatt atgtcatcat gacaactgca cataaagaaa aatataaatg 400
catacttccc cttgtgacaa gtggggatga ggaagaagaa aaggattata 450
aaggccctaa tccaagagag cttttggagc cactatttaa acaaagcagt 500
tgttcttaca gaattgagtc ttattggact tacgaagtat gtcattggaaa 550
acacattcgg cagtaccatg aagagaaaga aactggtcag aaaataaata 600
ttcacgagta ctaccttggg aatatgttgg ccaagaacct tctatttgaa 650
aaagaacgag aagcagaaga aaaggaaaaa tcaaatgaga ttcccactaa 700
aaatatcgaa ggtcagatga caccatacta tcctgtggga atgggaaatg 750
gtacaccttg tagtttgaaa cagaaccggc ccagatcaag tactgtgatg 800
tacatatgtc atcctgaatc taagcatgaa attctttcag tagctgaagt 850
tacaacttgt gaatatgaag ttgtcatttt gacaccactc ttgtgcagtc 900
atcctaaata taggttcaga gcatctcctg tgaatgacat attttgtcaa 950
tcactgccag gatctccatt taagcccctc accctgaggc agctggagca 1000
gcaggaagaa atactaaggg tgccttttag gagaaataaa gaggggtgtcg 1050
gttggtggaa atatgaattc tgctatggca aacatgtaca tcaataccat 1100
gaggacaagg atagtgggaa aacctctgtg gttgtcggga catggaacca 1150
agaagagcat attgaatggg ctaagaagaa tactgctaga gcttatcatc 1200
ttcaagacga tggtagccag acagtcagga tgggtgtcaca tttttatgga 1250
aatggagata tttgtgatat aactgacaaa ccaagacagg tgactgtaaa 1300
actaaagtgc aaagaatcag attcacctca tgctgttact gtatatatgc 1350

tagagcctca ctctgtcaa tatattcttg gggttgaatc tccagtgatc 1400
 tgtaaaatct tagatacagc agatgaaaat ggacttcttt ctctcccaa 1450
 ctaaaggata ttaaagttag gggaaagaaa agatcattga aagtcatgat 1500
 aatttctgtc ccactgtgtc tcattataga gttctcagcc attggacctc 1550
 ttctaaagga tgggtataaaa tgactctcaa ccactttgtg aatacatatg 1600
 tgtatataag aggttattga taaacttctg aggcagacat ttgtctcgct 1650
 ttttttcatt tttgttgtgt cttataaact gactgttttt ctttgcttgg 1700
 atactgtgat tccaaaataa atctcatcca agcaagttag agtccagcct 1750
 aatcaaagtgt cataattggt gtacctattg aaagttttta aataatagat 1800
 ttattatgta aattatagta tatgtaagta gctaataag taaagatcat 1850
 gaagaaagaa attgataggt gtaaatgaga gaccatgtaa aatatgtaaa 1900
 ttctagtacc tgaaatcctt tcaacagatt tttatatagc aactgctctc 1950
 tgcaagtagt taaactagaa actgggcaca tggtagaggc tcacatggga 2000
 gttgtcctca cccttgtaa tctcaagaaa ctcttattta taatagggtg 2050
 cttctctctc agaactttta tctattactt ttttcttctt atgagtatgt 2100
 ttactctcag agtatctatc tgatgtagac agttggtgat gcttctgaga 2150
 ctcagaatgg tttactctaa caaacactg tgctgtctat cccttgact 2200
 tgctactgt aatatggatt tcacttctga acagtttaca gcacaatatt 2250
 tattttaaag tgaataaaat gtccacaagc aaaaa 2285

<210> 94
 <211> 429
 <212> PRT
 <213> Homo Sapien

<400> 94
 Met Glu Glu Gly Gly Gly Gly Val Arg Ser Leu Val Pro Gly Gly
 1 5 10 15
 Pro Val Leu Leu Val Leu Cys Gly Leu Leu Glu Ala Ser Gly Gly
 20 25 30
 Gly Arg Ala Leu Pro Gln Leu Ser Asp Asp Ile Pro Phe Arg Val
 35 40 45
 Asn Trp Pro Gly Thr Glu Phe Ser Leu Pro Thr Thr Gly Val Leu
 50 55 60
 Tyr Lys Glu Asp Asn Tyr Val Ile Met Thr Thr Ala His Lys Glu
 65 70 75

Lys	Tyr	Lys	Cys	Ile	Leu	Pro	Leu	Val	Thr	Ser	Gly	Asp	Glu	Glu	
				80					85					90	
Glu	Glu	Lys	Asp	Tyr	Lys	Gly	Pro	Asn	Pro	Arg	Glu	Leu	Leu	Glu	
				95					100					105	
Pro	Leu	Phe	Lys	Gln	Ser	Ser	Cys	Ser	Tyr	Arg	Ile	Glu	Ser	Tyr	
				110					115					120	
Trp	Thr	Tyr	Glu	Val	Cys	His	Gly	Lys	His	Ile	Arg	Gln	Tyr	His	
				125					130					135	
Glu	Glu	Lys	Glu	Thr	Gly	Gln	Lys	Ile	Asn	Ile	His	Glu	Tyr	Tyr	
				140					145					150	
Leu	Gly	Asn	Met	Leu	Ala	Lys	Asn	Leu	Leu	Phe	Glu	Lys	Glu	Arg	
				155					160					165	
Glu	Ala	Glu	Glu	Lys	Glu	Lys	Ser	Asn	Glu	Ile	Pro	Thr	Lys	Asn	
				170					175					180	
Ile	Glu	Gly	Gln	Met	Thr	Pro	Tyr	Tyr	Pro	Val	Gly	Met	Gly	Asn	
				185					190					195	
Gly	Thr	Pro	Cys	Ser	Leu	Lys	Gln	Asn	Arg	Pro	Arg	Ser	Ser	Thr	
				200					205					210	
Val	Met	Tyr	Ile	Cys	His	Pro	Glu	Ser	Lys	His	Glu	Ile	Leu	Ser	
				215					220					225	
Val	Ala	Glu	Val	Thr	Thr	Cys	Glu	Tyr	Glu	Val	Val	Ile	Leu	Thr	
				230					235					240	
Pro	Leu	Leu	Cys	Ser	His	Pro	Lys	Tyr	Arg	Phe	Arg	Ala	Ser	Pro	
				245					250					255	
Val	Asn	Asp	Ile	Phe	Cys	Gln	Ser	Leu	Pro	Gly	Ser	Pro	Phe	Lys	
				260					265					270	
Pro	Leu	Thr	Leu	Arg	Gln	Leu	Glu	Gln	Gln	Glu	Glu	Ile	Leu	Arg	
				275					280					285	
Val	Pro	Phe	Arg	Arg	Asn	Lys	Glu	Gly	Val	Gly	Trp	Trp	Lys	Tyr	
				290					295					300	
Glu	Phe	Cys	Tyr	Gly	Lys	His	Val	His	Gln	Tyr	His	Glu	Asp	Lys	
				305					310					315	
Asp	Ser	Gly	Lys	Thr	Ser	Val	Val	Val	Gly	Thr	Trp	Asn	Gln	Glu	
				320					325					330	
Glu	His	Ile	Glu	Trp	Ala	Lys	Lys	Asn	Thr	Ala	Arg	Ala	Tyr	His	
				335					340					345	
Leu	Gln	Asp	Asp	Gly	Thr	Gln	Thr	Val	Arg	Met	Val	Ser	His	Phe	
				350					355					360	
Tyr	Gly	Asn	Gly	Asp	Ile	Cys	Asp	Ile	Thr	Asp	Lys	Pro	Arg	Gln	

365	370	375
Val Thr Val Lys	Leu Lys Cys Lys Glu Ser Asp Ser Pro His Ala	
380	385	390
Val Thr Val Tyr	Met Leu Glu Pro His Ser Cys Gln Tyr Ile Leu	
395	400	405
Gly Val Glu Ser	Pro Val Ile Cys Lys Ile Leu Asp Thr Ala Asp	
410	415	420
Glu Asn Gly Leu	Leu Ser Leu Pro Asn	
425		

<210> 95
 <211> 2542
 <212> DNA
 <213> Homo Sapien

<400> 95
 ttccgtttct gggaggagtg aggggcaacg ggtcggagaa aaaggaaaaa 50
 agaagggctc agcgctccc cgccgggccg tggacagagg ggcacagttt 100
 cggcagggcg gtgaggtcgc tgagggcccg ccggagatgt tttccttgtc 150
 gagcacggtg caaccccagg ttacagttcc tctgagtcac ctcatcaatg 200
 ccttccatac accaaaaaac acttctgttt ctctcagtgg agtgtcagtt 250
 tctcaaaaacc agcatcgaga tgtagttcct gagcatgagg ctcccagcag 300
 tgagccttca cttaacttaa gggaccttgg attatctgaa ctaaaaattg 350
 gacagattga tcagctggta gaaaatctac ttcttgatt ttgtaaaggc 400
 aaaaacattt cttcccattg gcatacatcc catgtctctg cacaatcctt 450
 ctttgaaaat aaatatggta acttagatat atttagtaca ttacgttctt 500
 cttgcttgta tcgacatcat tcaagagctc ttcaaagcat ttgttcagat 550
 cttcagtact ggccagtttt catacagtct cggggtttta aaactttgaa 600
 atcaaggaca cgacgtctcc agtctacctc cgagagatta gctgaaacac 650
 agaatatagc gccatcatte gtgaaggggt ttcttttgcg ggacagagga 700
 tcagatgttg agagtttga caaactcatg aaaacaaaa atatacctga 750
 agctcaccaa gatgcattta aaactggttt tgcggaagg tttctgaaag 800
 ctcaagcact cacacaaaa accaatgatt ccctaaggcg aaccgtctg 850
 attctcttcg ttctgctgct attcggcatt tatggacttc taaaaaaccc 900
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atcctgtcca gatgaaaaat gtcacctttg aacatgttaa aggggtggag 1000
 gaagctaaac aagaattaca ggaagttgtt gaattcttga aaaatccaca 1050
 aaaatttact attcttggag gtaaacctcc aaaaggaatt ctttttagttg 1100
 gacccccagg gactggaaag acacttcttg cccgagctgt ggccgggagaa 1150
 gctgatgttc ctttttatta tgcttctgga tccgaatttg atgagatgtt 1200
 tgtgggtgtg ggagccagcc gtatcagaaa tctttttagg gaagcaaagg 1250
 cgaatgctcc ttgtgttata tttattgatg aattagattc tgttggtggg 1300
 aagagaattg aatctccaat gcatccatat tcaaggcaga ccataaatca 1350
 acttcttgct gaaatggatg gttttaaac caatgaagga gttatcataa 1400
 taggagccac aaacttccca gaggcattag ataatgcctt aatacgtcct 1450
 ggtcgttttg acatgcaagt tacagttcca aggcagatg taaaaggtcg 1500
 aacagaaatt ttgaaatggg atctcaataa aataaagttt gatcaatccg 1550
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 cagctgcttg cacaaatgga tgtagtatg ggaggaagag tggcagagga 1950
 gcttatattt ggaaccgacc atattacaac aggtgcttcc agtgattttg 2000
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 gaaaagcttg gagttatgac ctacagtgat acagggaaac taagtccaga 2100
 aacccaatct gccatcgaac aagaaataag aatccttcta agggactcat 2150
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 ctcgcagaag ctttattgac ctatgagact ttggatgcca aagagattca 2250
 aattgttctt gaggggaaaa agttggaagt gagatgataa ctctcttgat 2300
 atggatgctt gctggtttta ttgcaagaat ataagtagca ttgcagtagt 2350
 ctacttttac aacgctttcc cctcattctt gatgtggtgt aattgaaggg 2400

tgtgaaatgc tttgtcaatc atttgtcaca tttatccagt ttgggttatt 2450
 ctcattatga cacctattgc aaattagcat cccatggcaa atatattttg 2500
 aaaaaataaa gaactatcag gattgaaaac aaaaaaaaaa aa 2542

<210> 96
 <211> 716
 <212> PRT
 <213> Homo Sapien

<400> 96
 Met Phe Ser Leu Ser Ser Thr Val Gln Pro Gln Val Thr Val Pro
 1 5 10 15
 Leu Ser His Leu Ile Asn Ala Phe His Thr Pro Lys Asn Thr Ser
 20 25 30
 Val Ser Leu Ser Gly Val Ser Val Ser Gln Asn Gln His Arg Asp
 35 40 45
 Val Val Pro Glu His Glu Ala Pro Ser Ser Glu Pro Ser Leu Asn
 50 55 60
 Leu Arg Asp Leu Gly Leu Ser Glu Leu Lys Ile Gly Gln Ile Asp
 65 70 75
 Gln Leu Val Glu Asn Leu Leu Pro Gly Phe Cys Lys Gly Lys Asn
 80 85 90
 Ile Ser Ser His Trp His Thr Ser His Val Ser Ala Gln Ser Phe
 95 100 105
 Phe Glu Asn Lys Tyr Gly Asn Leu Asp Ile Phe Ser Thr Leu Arg
 110 115 120
 Ser Ser Cys Leu Tyr Arg His His Ser Arg Ala Leu Gln Ser Ile
 125 130 135
 Cys Ser Asp Leu Gln Tyr Trp Pro Val Phe Ile Gln Ser Arg Gly
 140 145 150
 Phe Lys Thr Leu Lys Ser Arg Thr Arg Arg Leu Gln Ser Thr Ser
 155 160 165
 Glu Arg Leu Ala Glu Thr Gln Asn Ile Ala Pro Ser Phe Val Lys
 170 175 180
 Gly Phe Leu Leu Arg Asp Arg Gly Ser Asp Val Glu Ser Leu Asp
 185 190 195
 Lys Leu Met Lys Thr Lys Asn Ile Pro Glu Ala His Gln Asp Ala
 200 205 210
 Phe Lys Thr Gly Phe Ala Glu Gly Phe Leu Lys Ala Gln Ala Leu
 215 220 225
 Thr Gln Lys Thr Asn Asp Ser Leu Arg Arg Thr Arg Leu Ile Leu

	230		235		240
Phe Val Leu Leu Leu Phe Gly Ile Tyr Gly Leu Leu Lys Asn Pro	245		250		255
Phe Leu Ser Val Arg Phe Arg Thr Thr Thr Gly Leu Asp Ser Ala	260		265		270
Val Asp Pro Val Gln Met Lys Asn Val Thr Phe Glu His Val Lys	275		280		285
Gly Val Glu Glu Ala Lys Gln Glu Leu Gln Glu Val Val Glu Phe	290		295		300
Leu Lys Asn Pro Gln Lys Phe Thr Ile Leu Gly Gly Lys Leu Pro	305		310		315
Lys Gly Ile Leu Leu Val Gly Pro Pro Gly Thr Gly Lys Thr Leu	320		325		330
Leu Ala Arg Ala Val Ala Gly Glu Ala Asp Val Pro Phe Tyr Tyr	335		340		345
Ala Ser Gly Ser Glu Phe Asp Glu Met Phe Val Gly Val Gly Ala	350		355		360
Ser Arg Ile Arg Asn Leu Phe Arg Glu Ala Lys Ala Asn Ala Pro	365		370		375
Cys Val Ile Phe Ile Asp Glu Leu Asp Ser Val Gly Gly Lys Arg	380		385		390
Ile Glu Ser Pro Met His Pro Tyr Ser Arg Gln Thr Ile Asn Gln	395		400		405
Leu Leu Ala Glu Met Asp Gly Phe Lys Pro Asn Glu Gly Val Ile	410		415		420
Ile Ile Gly Ala Thr Asn Phe Pro Glu Ala Leu Asp Asn Ala Leu	425		430		435
Ile Arg Pro Gly Arg Phe Asp Met Gln Val Thr Val Pro Arg Pro	440		445		450
Asp Val Lys Gly Arg Thr Glu Ile Leu Lys Trp Tyr Leu Asn Lys	455		460		465
Ile Lys Phe Asp Gln Ser Val Asp Pro Glu Ile Ile Ala Arg Gly	470		475		480
Thr Val Gly Phe Ser Gly Ala Glu Leu Glu Asn Leu Val Asn Gln	485		490		495
Ala Ala Leu Lys Ala Ala Val Asp Gly Lys Glu Met Val Thr Met	500		505		510
Lys Glu Leu Glu Phe Ser Lys Asp Lys Ile Leu Met Gly Pro Glu	515		520		525

Arg	Arg	Ser	Val	Glu	Ile	Asp	Asn	Lys	Asn	Lys	Thr	Ile	Thr	Ala	530	535	540
Tyr	His	Glu	Ser	Gly	His	Ala	Ile	Ile	Ala	Tyr	Tyr	Thr	Lys	Asp	545	550	555
Ala	Met	Pro	Ile	Asn	Lys	Ala	Thr	Ile	Met	Pro	Arg	Gly	Pro	Thr	560	565	570
Leu	Gly	His	Val	Ser	Leu	Leu	Pro	Glu	Asn	Asp	Arg	Trp	Asn	Glu	575	580	585
Thr	Arg	Ala	Gln	Leu	Leu	Ala	Gln	Met	Asp	Val	Ser	Met	Gly	Gly	590	595	600
Arg	Val	Ala	Glu	Glu	Leu	Ile	Phe	Gly	Thr	Asp	His	Ile	Thr	Thr	605	610	615
Gly	Ala	Ser	Ser	Asp	Phe	Asp	Asn	Ala	Thr	Lys	Ile	Ala	Lys	Arg	620	625	630
Met	Val	Thr	Lys	Phe	Gly	Met	Ser	Glu	Lys	Leu	Gly	Val	Met	Thr	635	640	645
Tyr	Ser	Asp	Thr	Gly	Lys	Leu	Ser	Pro	Glu	Thr	Gln	Ser	Ala	Ile	650	655	660
Glu	Gln	Glu	Ile	Arg	Ile	Leu	Leu	Arg	Asp	Ser	Tyr	Glu	Arg	Ala	665	670	675
Lys	His	Ile	Leu	Lys	Thr	His	Ala	Lys	Glu	His	Lys	Asn	Leu	Ala	680	685	690
Glu	Ala	Leu	Leu	Thr	Tyr	Glu	Thr	Leu	Asp	Ala	Lys	Glu	Ile	Gln	695	700	705
Ile	Val	Leu	Glu	Gly	Lys	Lys	Leu	Glu	Val	Arg					710	715	

<210> 97
 <211> 1571
 <212> DNA
 <213> Homo Sapien

<400> 97
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 gtgggtctga ggggaccaga aggggtgagct acgttggtt tctggaagg 100
 gaggctatat ggcgtcaattc cccaaaacaa gttttgacat ttcccctgaa 150
 atgtcattct ctatctattc actgcaagtg cctgctgttc caggccttac 200
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<210> 98
<211> 176
<212> PRT
<213> Homo Sapien

<400> 98
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Gly	Ser	Cys	Val	Ile	Ala	Thr	Asn	Leu	Gln	Glu	Ile	Arg	Asn	Gly	35	40	45
Phe	Ser	Glu	Ile	Arg	Gly	Ser	Val	Gln	Ala	Lys	Asp	Gly	Asn	Ile	50	55	60
Asp	Ile	Arg	Ile	Leu	Arg	Arg	Thr	Glu	Ser	Leu	Gln	Asp	Thr	Lys	65	70	75
Pro	Ala	Asn	Arg	Cys	Cys	Leu	Leu	Arg	His	Leu	Leu	Arg	Leu	Tyr	80	85	90
Leu	Asp	Arg	Val	Phe	Lys	Asn	Tyr	Gln	Thr	Pro	Asp	His	Tyr	Thr	95	100	105
Leu	Arg	Lys	Ile	Ser	Ser	Leu	Ala	Asn	Ser	Phe	Leu	Thr	Ile	Lys	110	115	120
Lys	Asp	Leu	Arg	Leu	Cys	His	Ala	His	Met	Thr	Cys	His	Cys	Gly	125	130	135
Glu	Glu	Ala	Met	Lys	Lys	Tyr	Ser	Gln	Ile	Leu	Ser	His	Phe	Glu	140	145	150
Lys	Leu	Glu	Pro	Gln	Ala	Ala	Val	Val	Lys	Ala	Leu	Gly	Glu	Leu	155	160	165
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<210> 99
 <211> 1904
 <212> DNA
 <213> Homo Sapien

<400> 99
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<210> 100
 <211> 308
 <212> PRT
 <213> Homo Sapien

<400> 100

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Pro	Gln	Tyr	Leu	Gly	Leu	Arg	Pro	Ala	Ala	Ala	Gly	Ala	Gly	Ala	35	40	45	
Pro	Gly	Gln	Gln	Leu	Pro	Glu	Pro	Arg	Ser	Ser	Asp	Gly	Leu	Gly	50	55	60	
Val	Gly	Arg	Ala	Trp	Ser	Trp	Ala	Trp	Pro	Thr	Asn	His	Thr	Gly	65	70	75	
Ala	Leu	Ala	Arg	Ala	Gly	Ala	Ala	Gly	Ala	Leu	Pro	Ala	Gln	Arg	80	85	90	
Thr	Lys	Arg	Lys	Pro	Ser	Ile	Lys	Ala	Ala	Arg	Ala	Lys	Lys	Ile	95	100	105	
Phe	Gly	Trp	Gly	Asp	Phe	Tyr	Phe	Arg	Val	His	Thr	Leu	Lys	Phe	110	115	120	
Ser	Leu	Leu	Val	Thr	Gly	Lys	Ile	Val	Asp	His	Val	Asn	Gly	Thr	125	130	135	
Phe	Ser	Val	Tyr	Phe	Arg	His	Asn	Ser	Ser	Ser	Leu	Gly	Asn	Leu	140	145	150	
Ser	Val	Ser	Ile	Val	Pro	Pro	Ser	Lys	Arg	Val	Glu	Phe	Gly	Gly	155	160	165	
Val	Trp	Leu	Pro	Gly	Pro	Val	Pro	His	Pro	Leu	Gln	Ser	Thr	Leu	170	175	180	
Ala	Leu	Glu	Gly	Val	Leu	Pro	Gly	Leu	Gly	Pro	Pro	Leu	Gly	Met	185	190	195	
Ala	Ala	Ala	Ala	Ala	Gly	Pro	Gly	Leu	Gly	Gly	Ser	Leu	Gly	Gly	200	205	210	
Ala	Leu	Ala	Gly	Pro	Leu	Gly	Gly	Ala	Leu	Gly	Val	Pro	Gly	Ala	215	220	225	
Lys	Glu	Ser	Arg	Ala	Phe	Asn	Cys	His	Val	Glu	Tyr	Glu	Lys	Thr	230	235	240	
Asn	Arg	Ala	Arg	Lys	His	Arg	Pro	Cys	Leu	Tyr	Asp	Pro	Ser	Gln	245	250	255	
Val	Cys	Phe	Thr	Glu	His	Thr	Gln	Ser	Gln	Ala	Ala	Trp	Leu	Cys				

260	265	270
Ala Lys Pro Phe Lys Val Ile Cys Ile Phe Val Ser Phe Leu Ser		
275	280	285
Phe Asp Tyr Lys Leu Val Gln Lys Val Cys Pro Asp Tyr Asn Phe		
290	295	300
Gln Ser Glu His Pro Tyr Phe Gly		
305		

<210> 101
 <211> 2031
 <212> DNA
 <213> Homo Sapien

 <220>
 <221> unsure
 <222> 2020
 <223> unknown base

<400> 101
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 agtccccctc agaggcgact gcaactcgcc cggccgtgcc tggactccct 200
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<210> 102

<211> 607

<212> PRT

<213> Homo Sapien

<400> 102

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Phe	Pro	Asp	Gly	Val	Arg	Pro	Gln	Pro	Ser	Ser	Ser	Pro	Ser	Gly
				20					25					30

<210> 103
<211> 2099
<212> DNA
<213> Homo Sapien

<400> 103
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<210> 104
 <211> 212
 <212> PRT
 <213> Homo Sapien

<400> 104
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 20 25 30
 His Ser Leu Cys Phe Asn Phe Thr Ile Lys Ser Leu Ser Arg Pro
 35 40 45
 Gly Gln Pro Trp Cys Glu Ala Gln Val Phe Leu Asn Lys Asn Leu
 50 55 60
 Phe Leu Gln Tyr Asn Ser Asp Asn Asn Met Val Lys Pro Leu Gly
 65 70 75
 Leu Leu Gly Lys Lys Val Tyr Ala Thr Ser Thr Trp Gly Glu Leu
 80 85 90
 Thr Gln Thr Leu Gly Glu Val Gly Arg Asp Leu Arg Met Leu Leu
 95 100 105

Cys	Asp	Ile	Lys	Pro	Gln	Ile	Lys	Thr	Ser	Asp	Pro	Ser	Thr	Leu
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Gln	Val	Glu	Met	Phe	Cys	Gln	Arg	Glu	Ala	Glu	Arg	Cys	Thr	Gly
				125					130					135
Ala	Ser	Trp	Gln	Phe	Ala	Thr	Asn	Gly	Glu	Lys	Ser	Leu	Leu	Phe
				140					145					150
Asp	Ala	Met	Asn	Met	Thr	Trp	Thr	Val	Ile	Asn	His	Glu	Ala	Ser
				155					160					165
Lys	Ile	Lys	Glu	Thr	Trp	Lys	Lys	Asp	Arg	Gly	Leu	Glu	Lys	Tyr
				170					175					180
Phe	Arg	Lys	Leu	Ser	Lys	Gly	Asp	Cys	Asp	His	Trp	Leu	Arg	Glu
				185					190					195
Phe	Leu	Gly	His	Trp	Glu	Ala	Met	Pro	Glu	Pro	Thr	Gly	Arg	Arg
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Ser Thr

<210> 105
 <211> 1975
 <212> DNA
 <213> Homo Sapien

<400> 105
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<210> 106
<211> 372
<212> PRT
<213> Homo Sapien
<400> 106

Met	Leu	Ala	Val	Ser	Leu	Thr	Val	Pro	Leu	Leu	Gly	Ala	Met	Met	1	5	10	15
Leu	Leu	Glu	Ser	Pro	Ile	Asp	Pro	Gln	Pro	Leu	Ser	Phe	Lys	Glu	20	25	30	
Pro	Pro	Leu	Leu	Leu	Gly	Val	Leu	His	Pro	Asn	Thr	Lys	Leu	Arg	35	40	45	
Gln	Ala	Glu	Arg	Leu	Phe	Glu	Asn	Gln	Leu	Val	Gly	Pro	Glu	Ser	50	55	60	
Ile	Ala	His	Ile	Gly	Asp	Val	Met	Phe	Thr	Gly	Thr	Ala	Asp	Gly	65	70	75	
Arg	Val	Val	Lys	Leu	Glu	Asn	Gly	Glu	Ile	Glu	Thr	Ile	Ala	Arg	80	85	90	
Phe	Gly	Ser	Gly	Pro	Cys	Lys	Thr	Arg	Asp	Asp	Glu	Pro	Val	Cys	95	100	105	
Gly	Arg	Pro	Leu	Gly	Ile	Arg	Ala	Gly	Pro	Asn	Gly	Thr	Leu	Phe	110	115	120	
Val	Ala	Asp	Ala	Tyr	Lys	Gly	Leu	Phe	Glu	Val	Asn	Pro	Trp	Lys	125	130	135	
Arg	Glu	Val	Lys	Leu	Leu	Leu	Ser	Ser	Glu	Thr	Pro	Ile	Glu	Gly	140	145	150	
Lys	Asn	Met	Ser	Phe	Val	Asn	Asp	Leu	Thr	Val	Thr	Gln	Asp	Gly	155	160	165	
Arg	Lys	Ile	Tyr	Phe	Thr	Asp	Ser	Ser	Ser	Lys	Trp	Gln	Arg	Arg	170	175	180	
Asp	Tyr	Leu	Leu	Leu	Val	Met	Glu	Gly	Thr	Asp	Asp	Gly	Arg	Leu	185	190	195	
Leu	Glu	Tyr	Asp	Thr	Val	Thr	Arg	Glu	Val	Lys	Val	Leu	Leu	Asp	200	205	210	
Gln	Leu	Arg	Phe	Pro	Asn	Gly	Val	Gln	Leu	Ser	Pro	Ala	Glu	Asp	215	220	225	
Phe	Val	Leu	Val	Ala	Glu	Thr	Thr	Met	Ala	Arg	Ile	Arg	Arg	Val	230	235	240	
Tyr	Val	Ser	Gly	Leu	Met	Lys	Gly	Gly	Ala	Asp	Leu	Phe	Val	Glu	245	250	255	
Asn	Met	Pro	Gly	Phe	Pro	Asp	Asn	Ile	Arg	Pro	Ser	Ser	Ser	Gly	260	265	270	
Gly	Tyr	Trp	Val	Gly	Met	Ser	Thr	Ile	Arg	Pro	Asn	Pro	Gly	Phe	275	280	285	
Ser	Met	Leu	Asp	Phe	Leu	Ser	Glu	Arg	Pro	Trp	Ile	Lys	Arg	Met				

	290		295		300
Ile Phe Lys Leu Phe Ser Gln Glu Thr	Val Met Lys Phe Val Pro				
305	310				315
Arg Tyr Ser Leu Val Leu Glu Leu Ser	Asp Ser Gly Ala Phe Arg				
320	325				330
Arg Ser Leu His Asp Pro Asp Gly Leu	Val Ala Thr Tyr Ile Ser				
335	340				345
Glu Val His Glu His Asp Gly His Leu	Tyr Leu Gly Ser Phe Arg				
350	355				360
Ser Pro Phe Leu Cys Arg Leu Ser Leu	Gln Ala Val				
365	370				

<210> 107
 <211> 2343
 <212> DNA
 <213> Homo Sapien

<400> 107
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 cccgcgagtc agaagcttcg cgagggccca gagaggcggg ggggtgggcg 150
 accctacgcc agctccgggc gggagaaagc ccaccctctc ccgcgcccc 200
 ggaaaccgcc ggcgttcggc gctgcgcaga gccatggaat tctcctggct 250
 ggagacgcgc tgggcgcggc ctttttacct ggcgttcgtg ttctgcctgg 300
 ccctggggct gctgcaggcc attaagctgt acctgcggag gcagcggctg 350
 ctgcgggacc tgcgcccctt cccagcgcgc cccaccact ggttccttgg 400
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 ttgaaaaata ccctcgtgcc ttccctttct ggattgggccc ctttcaggca 500
 tttttctgta tctatgacct agactatgca aagacacttc tgagcagaac 550
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 aaggactagc ggctctagac ggaccaagt ggttcagca tcgtcgccta 650
 ctaactcctg gattccattt taacatcctg aaagcatata ttgagtgat 700
 ggctcattct gtgaaaatga tgctggataa gtgggagaag atttgcagca 750
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 gatataatca tgaaatgcgc ttccagcaag gagaccaact gccagacaaa 850
 cagcaccat gatccttatg caaaagccat atttgaactc agcaaatca 900

tatttcaccg cttgtacagt ttgttgtatc acagtgacat aattttcaaa 950
ctcagccctc agggctaccg cttccagaag ttaagccgag tgttgaatca 1000
gtacacagat acaataatcc aggaaagaaa gaaatccctc caggctgggg 1050
taaagcagga taacactccg aagaggaagt accaggattt tctggatatt 1100
gtcctttctg ccaaggatga aagtggtagc agcttctcag atattgatgt 1150
acactctgaa gtgagcacat tcctgttggc aggacatgac accttggcag 1200
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cacttgggac cagctgggtg agatgtcgta caccacaatg tgcacaaagg 1350
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gaagttaa at ttacagctaa tgatccaagc agatagaaag ggatcaatgt 1850
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caaaatcatt tctaggtaca cagtgtgtca gctagatctg tttctatata 1950
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tcccaacact agaaaatcat gtagaataaa aattttaaat ctacttcac 2150
ttagccgaca ttocatgccc tgaccaatcc tactgctttt cctaaaaaca 2200
gaataatttg gtgtgcattc tttcagactt tttcctatac attttatatg 2250
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ttgatttttt tcaacttaata aaaattcacc ttattcctta aaa 2343

<210> 108
 <211> 509
 <212> PRT
 <213> Homo Sapien

<400> 108

Met	Glu	Phe	Ser	Trp	Leu	Glu	Thr	Arg	Trp	Ala	Arg	Pro	Phe	Tyr	1	5	10	15
Leu	Ala	Phe	Val	Phe	Cys	Leu	Ala	Leu	Gly	Leu	Leu	Gln	Ala	Ile	20	25	30	
Lys	Leu	Tyr	Leu	Arg	Arg	Gln	Arg	Leu	Leu	Arg	Asp	Leu	Arg	Pro	35	40	45	
Phe	Pro	Ala	Pro	Pro	Thr	His	Trp	Phe	Leu	Gly	His	Gln	Lys	Phe	50	55	60	
Ile	Gln	Asp	Asp	Asn	Met	Glu	Lys	Leu	Glu	Glu	Ile	Ile	Glu	Lys	65	70	75	
Tyr	Pro	Arg	Ala	Phe	Pro	Phe	Trp	Ile	Gly	Pro	Phe	Gln	Ala	Phe	80	85	90	
Phe	Cys	Ile	Tyr	Asp	Pro	Asp	Tyr	Ala	Lys	Thr	Leu	Leu	Ser	Arg	95	100	105	
Thr	Asp	Pro	Lys	Ser	Gln	Tyr	Leu	Gln	Lys	Phe	Ser	Pro	Pro	Leu	110	115	120	
Leu	Gly	Lys	Gly	Leu	Ala	Ala	Leu	Asp	Gly	Pro	Lys	Trp	Phe	Gln	125	130	135	
His	Arg	Arg	Leu	Leu	Thr	Pro	Gly	Phe	His	Phe	Asn	Ile	Leu	Lys	140	145	150	
Ala	Tyr	Ile	Glu	Val	Met	Ala	His	Ser	Val	Lys	Met	Met	Leu	Asp	155	160	165	
Lys	Trp	Glu	Lys	Ile	Cys	Ser	Thr	Gln	Asp	Thr	Ser	Val	Glu	Val	170	175	180	
Tyr	Glu	His	Ile	Asn	Ser	Met	Ser	Leu	Asp	Ile	Ile	Met	Lys	Cys	185	190	195	
Ala	Phe	Ser	Lys	Glu	Thr	Asn	Cys	Gln	Thr	Asn	Ser	Thr	His	Asp	200	205	210	
Pro	Tyr	Ala	Lys	Ala	Ile	Phe	Glu	Leu	Ser	Lys	Ile	Ile	Phe	His	215	220	225	
Arg	Leu	Tyr	Ser	Leu	Leu	Tyr	His	Ser	Asp	Ile	Ile	Phe	Lys	Leu	230	235	240	
Ser	Pro	Gln	Gly	Tyr	Arg	Phe	Gln	Lys	Leu	Ser	Arg	Val	Leu	Asn	245	250	255	
Gln	Tyr	Thr	Asp	Thr	Ile	Ile	Gln	Glu	Arg	Lys	Lys	Ser	Leu	Gln				

260	265	270
Ala Gly Val Lys Gln Asp Asn Thr Pro	Lys Arg Lys Tyr Gln Asp	
275	280	285
Phe Leu Asp Ile Val Leu Ser Ala Lys	Asp Glu Ser Gly Ser Ser	
290	295	300
Phe Ser Asp Ile Asp Val His Ser Glu	Val Ser Thr Phe Leu Leu	
305	310	315
Ala Gly His Asp Thr Leu Ala Ala Ser	Ile Ser Trp Ile Leu Tyr	
320	325	330
Cys Leu Ala Leu Asn Pro Glu His Gln	Glu Arg Cys Arg Glu Glu	
335	340	345
Val Arg Gly Ile Leu Gly Asp Gly Ser	Ser Ile Thr Trp Asp Gln	
350	355	360
Leu Gly Glu Met Ser Tyr Thr Thr Met	Cys Ile Lys Glu Thr Cys	
365	370	375
Arg Leu Ile Pro Ala Val Pro Ser Ile	Ser Arg Asp Leu Ser Lys	
380	385	390
Pro Leu Thr Phe Pro Asp Gly Cys Thr	Leu Pro Ala Gly Ile Thr	
395	400	405
Val Val Leu Ser Ile Trp Gly Leu His	His Asn Pro Ala Val Trp	
410	415	420
Lys Asn Pro Lys Val Phe Asp Pro Leu	Arg Phe Ser Gln Glu Asn	
425	430	435
Ser Asp Gln Arg His Pro Tyr Ala Tyr	Leu Pro Phe Ser Ala Gly	
440	445	450
Ser Arg Asn Cys Ile Gly Gln Glu Phe	Ala Met Ile Glu Leu Lys	
455	460	465
Val Thr Ile Ala Leu Ile Leu Leu His	Phe Arg Val Thr Pro Asp	
470	475	480
Pro Thr Arg Pro Leu Thr Phe Pro Asn	His Phe Ile Leu Lys Pro	
485	490	495
Lys Asn Gly Met Tyr Leu His Leu Lys	Lys Leu Ser Glu Cys	
500	505	

<210> 109
 <211> 1113
 <212> DNA
 <213> Homo Sapien

<400> 109
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ggactcagat tcctggattc tgagatccag accagctcct cccagacctc 150
tccagaagaa gccatgggaa cccctcgtat ccagcatttg ctgacctcc 200
tggtcctagg agcctccctc ctgacctcgg gcctagagct gtattgtcaa 250
aagggctctgt ccatgactgt ggaagcagat ccagccaata tgtttaactg 300
gaccacagag gaagtggaga cttgtgacaa aggggcactt tgccaggaaa 350
ccatactaata aattaaagca gggactgaga cagccatttt ggccacgaag 400
ggctgcaccc cggaagggga ggaggccata acaattgtcc agcactcttc 450
acctcccggc ctgactgtga cctcctacag taactactgt gaggattcct 500
tctgtaatga caaagacagc ctgtctcagt tttgggagtt cagtgaagacc 550
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gatgctatca aggaaaactt gagatcactg gaggtggcat tgagtcgtct 700
gtggaggtca aaggctgtac agccatgatt ggctgcaggc tgatgtctgg 750
aatcttagca gtaggacca tgtttgtgag ggaagcgtgc ccacatcagc 800
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cctgtttggg gggtacagct actgctgcca ttgctgctgc catcatttat 900
tcacttttcc taagaaggca cttctgggcc tgggtctgag gacatctttt 950
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gggaatttga gggagaatac agagatacta tgaacgtatt tgacattttt 1050
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atttctgctg tga 1113

<210> 110
<211> 249
<212> PRT
<213> Homo Sapien

<400> 110
Met Gly Thr Pro Arg Ile Gln His Leu Leu Ile Leu Leu Val Leu
1 5 10 15
Gly Ala Ser Leu Leu Thr Ser Gly Leu Glu Leu Tyr Cys Gln Lys
20 25 30
Gly Leu Ser Met Thr Val Glu Ala Asp Pro Ala Asn Met Phe Asn
35 40 45

Trp Thr Thr Glu Glu Val Glu Thr Cys Asp Lys Gly Ala Leu Cys
50 55 60

Gln Glu Thr Ile Leu Ile Ile Lys Ala Gly Thr Glu Thr Ala Ile
65 70 75

Leu Ala Thr Lys Gly Cys Ile Pro Glu Gly Glu Glu Ala Ile Thr
80 85 90

Ile Val Gln His Ser Ser Pro Pro Gly Leu Ile Val Thr Ser Tyr
95 100 105

Ser Asn Tyr Cys Glu Asp Ser Phe Cys Asn Asp Lys Asp Ser Leu
110 115 120

Ser Gln Phe Trp Glu Phe Ser Glu Thr Thr Ala Ser Thr Val Ser
125 130 135

Thr Thr Leu His Cys Pro Thr Cys Val Ala Leu Gly Thr Cys Phe
140 145 150

Ser Ala Pro Ser Leu Pro Cys Pro Asn Gly Thr Thr Arg Cys Tyr
155 160 165

Gln Gly Lys Leu Glu Ile Thr Gly Gly Gly Ile Glu Ser Ser Val
170 175 180

Glu Val Lys Gly Cys Thr Ala Met Ile Gly Cys Arg Leu Met Ser
185 190 195

Gly Ile Leu Ala Val Gly Pro Met Phe Val Arg Glu Ala Cys Pro
200 205 210

His Gln Leu Leu Thr Gln Pro Arg Lys Thr Glu Asn Gly Ala Thr
215 220 225

Cys Leu Pro Ile Pro Val Trp Gly Leu Gln Leu Leu Leu Pro Leu
230 235 240

Leu Leu Pro Ser Phe Ile His Phe Ser
245

<210> 111
<211> 3162
<212> DNA
<213> Homo Sapien

<400> 111
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ctttgctgac tcttacgagg aaaaaaaaaa aaaaaaaaaa aaccatttaa 150
agggaaagat aaacggagac ggaggaaagg tggcagccag attacttaga 200
gaggcacaga ggagagagat cggggtgagt cgccatgggg actcccaggg 250

cccagcacc cgcgcctccc cagctgctgt tcctaattct gctgagctgt 300
 ccctggatcc aggggtctgcc cctgaaggag gaggagatat tgccagagcc 350
 tggaagtgag acccccacgg tggcctctga ggccctggct gaactgcttc 400
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 gatccggacc ccacgctagc caccctcccg gccggccaga ctctcgagct 500
 gccctccctg ccacggggcca ctgagccggg gacagggcct ctgacaacag 550
 ccgtcacc ctaacgggggc agggggggcag gcccactgc gccagaactg 600
 ctgaccccg cccaggaac cacagcccca ccccccacca gccctgcctc 650
 cccagggcct ccccttgggc ctgagggagg agaggaggag acgacgacca 700
 ccatcatcac cagcacaact gttaccacta cgggtgaccag cccagttctg 750
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 ggggagcccc gtcagccgca ccctgggggt cctggactgc acttacagca 850
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 tccttcggag cccaaccaac cggctgcttc tgcacttcca gagccacagg 1050
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ccgcccaaaa aa 3162

<210> 112

<211> 910

<212> PRT

<213> Homo Sapien

<400> 112

Met	Gly	Thr	Pro	Arg	Ala	Gln	His	Pro	Pro	Pro	Pro	Gln	Leu	Leu	
1				5					10					15	
Phe	Leu	Ile	Leu	Leu	Ser	Cys	Pro	Trp	Ile	Gln	Gly	Leu	Pro	Leu	
				20					25					30	
Lys	Glu	Glu	Glu	Ile	Leu	Pro	Glu	Pro	Gly	Ser	Glu	Thr	Pro	Thr	
				35					40					45	
Val	Ala	Ser	Glu	Ala	Leu	Ala	Glu	Leu	Leu	His	Gly	Ala	Leu	Leu	
				50					55					60	
Arg	Arg	Gly	Pro	Glu	Met	Gly	Tyr	Leu	Pro	Gly	Ser	Asp	Pro	Asp	
				65					70					75	
Pro	Thr	Leu	Ala	Thr	Pro	Pro	Ala	Gly	Gln	Thr	Leu	Ala	Val	Pro	
				80					85					90	
Ser	Leu	Pro	Arg	Ala	Thr	Glu	Pro	Gly	Thr	Gly	Pro	Leu	Thr	Thr	
				95					100					105	
Ala	Val	Thr	Pro	Asn	Gly	Val	Arg	Gly	Ala	Gly	Pro	Thr	Ala	Pro	
				110					115					120	
Glu	Leu	Leu	Thr	Pro	Pro	Pro	Gly	Thr	Thr	Ala	Pro	Pro	Pro	Pro	
				125					130					135	
Ser	Pro	Ala	Ser	Pro	Gly	Pro	Pro	Leu	Gly	Pro	Glu	Gly	Gly	Glu	
				140					145					150	
Glu	Glu	Thr	Thr	Thr	Thr	Ile	Ile	Thr	Thr	Thr	Thr	Val	Thr	Thr	
				155					160					165	
Thr	Val	Thr	Ser	Pro	Val	Leu	Cys	Asn	Asn	Asn	Ile	Ser	Glu	Gly	
				170					175					180	
Glu	Gly	Tyr	Val	Glu	Ser	Pro	Asp	Leu	Gly	Ser	Pro	Val	Ser	Arg	
				185					190					195	
Thr	Leu	Gly	Leu	Leu	Asp	Cys	Thr	Tyr	Ser	Ile	His	Val	Tyr	Pro	
				200					205					210	
Gly	Tyr	Gly	Ile	Glu	Ile	Gln	Val	Gln	Thr	Leu	Asn	Leu	Ser	Gln	
				215					220					225	
Glu	Glu	Glu	Leu	Leu	Val	Leu	Ala	Gly	Gly	Gly	Ser	Pro	Gly	Leu	
				230					235					240	
Ala	Pro	Arg	Leu	Leu	Ala	Asn	Ser	Ser	Met	Leu	Gly	Glu	Gly	Gln	
				245					250					255	

Val	Leu	Arg	Ser	Pro	Thr	Asn	Arg	Leu	Leu	Leu	His	Phe	Gln	Ser	
				260					265					270	
Pro	Arg	Val	Pro	Arg	Gly	Gly	Gly	Phe	Arg	Ile	His	Tyr	Gln	Ala	
				275					280					285	
Tyr	Leu	Leu	Ser	Cys	Gly	Phe	Pro	Pro	Arg	Pro	Ala	His	Gly	Asp	
				290					295					300	
Val	Ser	Val	Thr	Asp	Leu	His	Pro	Gly	Gly	Thr	Ala	Thr	Phe	His	
				305					310					315	
Cys	Asp	Ser	Gly	Tyr	Gln	Leu	Gln	Gly	Glu	Glu	Thr	Leu	Ile	Cys	
				320					325					330	
Leu	Asn	Gly	Thr	Arg	Pro	Ser	Trp	Asn	Gly	Glu	Thr	Pro	Ser	Cys	
				335					340					345	
Met	Ala	Ser	Cys	Gly	Gly	Thr	Ile	His	Asn	Ala	Thr	Leu	Gly	Arg	
				350					355					360	
Ile	Val	Ser	Pro	Glu	Pro	Gly	Gly	Ala	Val	Gly	Pro	Asn	Leu	Thr	
				365					370					375	
Cys	Arg	Trp	Val	Ile	Glu	Ala	Ala	Glu	Gly	Arg	Arg	Leu	His	Leu	
				380					385					390	
His	Phe	Glu	Arg	Val	Ser	Leu	Asp	Glu	Asp	Asn	Asp	Arg	Leu	Met	
				395					400					405	
Val	Arg	Ser	Gly	Gly	Ser	Pro	Leu	Ser	Pro	Val	Ile	Tyr	Asp	Ser	
				410					415					420	
Asp	Met	Asp	Asp	Val	Pro	Glu	Arg	Gly	Leu	Ile	Ser	Asp	Ala	Gln	
				425					430					435	
Ser	Leu	Tyr	Val	Glu	Leu	Leu	Ser	Glu	Thr	Pro	Ala	Asn	Pro	Leu	
				440					445					450	
Leu	Leu	Ser	Leu	Arg	Phe	Glu	Ala	Phe	Glu	Glu	Asp	Arg	Cys	Phe	
				455					460					465	
Ala	Pro	Phe	Leu	Ala	His	Gly	Asn	Val	Thr	Thr	Thr	Asp	Pro	Glu	
				470					475					480	
Tyr	Arg	Pro	Gly	Ala	Leu	Ala	Thr	Phe	Ser	Cys	Leu	Pro	Gly	Tyr	
				485					490					495	
Ala	Leu	Glu	Pro	Pro	Gly	Pro	Pro	Asn	Ala	Ile	Glu	Cys	Val	Asp	
				500					505					510	
Pro	Thr	Glu	Pro	His	Trp	Asn	Asp	Thr	Glu	Pro	Ala	Cys	Lys	Ala	
				515					520					525	
Met	Cys	Gly	Gly	Glu	Leu	Ser	Glu	Pro	Ala	Gly	Val	Val	Leu	Ser	
				530					535					540	
Pro	Asp	Trp	Pro	Gln	Ser	Tyr	Ser	Pro	Gly	Gln	Asp	Cys	Val	Trp	

Glu	Gly	Gly	Asn	Leu	Ala	Leu	Ala	Ile	Leu	Leu	Pro	Leu	Gly	Leu
				845					850					855
Val	Ile	Val	Leu	Gly	Ser	Gly	Val	Tyr	Ile	Tyr	Tyr	Thr	Lys	Leu
				860					865					870
Gln	Gly	Lys	Ser	Leu	Phe	Gly	Phe	Ser	Gly	Ser	His	Ser	Tyr	Ser
				875					880					885
Pro	Ile	Thr	Val	Glu	Ser	Asp	Phe	Ser	Asn	Pro	Leu	Tyr	Glu	Ala
				890					895					900
Gly	Asp	Thr	Arg	Glu	Tyr	Glu	Val	Ser	Ile					
				905					910					

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 <211> 3323
 <212> DNA
 <213> Homo Sapien

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 ccgtcggggg gctcggggcg cgcgggagcc cactgtgggg ctcgggcatg 150
 gcgggcccga ggacctgagc tctcctcagg ggagcgggga ggcagctgct 200
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 gcgccgagcc accgcccgcg ctacctcagc ccttcgcgaa gcgccgggca 300
 gctcgggaac atggccctgg agcggctctg ctcggtcctc aaagtgttgt 350
 taataacagt actggtagtg gaagggattg ccgtggccca aaaaacccaa 400
 gatggacaaa atattggaat caagcatatt cctgcaacct agtgtggcat 450
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 actcatatcc accaaacaag gagtgtatct acattttgga agctgctcca 550
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<210> 114

<211> 525

<212> PRT

<213> Homo Sapien

<400> 114

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Thr	Val	Leu	Val	Val	Glu	Gly	Ile	Ala	Val	Ala	Gln	Lys	Thr	Gln
				20					25					30
Asp	Gly	Gln	Asn	Ile	Gly	Ile	Lys	His	Ile	Pro	Ala	Thr	Gln	Cys
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Gly	Ile	Trp	Val	Arg	Thr	Ser	Asn	Gly	Gly	His	Phe	Ala	Ser	Pro
			50						55					60
Asn	Tyr	Pro	Asp	Ser	Tyr	Pro	Pro	Asn	Lys	Glu	Cys	Ile	Tyr	Ile
			65						70					75

Leu	Glu	Ala	Ala	Pro	Arg	Gln	Arg	Ile	Glu	Leu	Thr	Phe	Asp	Glu	
				80					85					90	
His	Tyr	Tyr	Ile	Glu	Pro	Ser	Phe	Glu	Cys	Arg	Phe	Asp	His	Leu	
				95					100					105	
Glu	Val	Arg	Asp	Gly	Pro	Phe	Gly	Phe	Ser	Pro	Leu	Ile	Asp	Arg	
				110					115					120	
Tyr	Cys	Gly	Val	Lys	Ser	Pro	Pro	Leu	Ile	Arg	Ser	Thr	Gly	Arg	
				125					130					135	
Phe	Met	Trp	Ile	Lys	Phe	Ser	Ser	Asp	Glu	Glu	Leu	Glu	Gly	Leu	
				140					145					150	
Gly	Phe	Arg	Ala	Lys	Tyr	Ser	Phe	Ile	Pro	Asp	Pro	Asp	Phe	Thr	
				155					160					165	
Tyr	Leu	Gly	Gly	Ile	Leu	Asn	Pro	Ile	Pro	Asp	Cys	Gln	Phe	Glu	
				170					175					180	
Leu	Ser	Gly	Ala	Asp	Gly	Ile	Val	Arg	Ser	Ser	Gln	Val	Glu	Gln	
				185					190					195	
Glu	Glu	Lys	Thr	Lys	Pro	Gly	Gln	Ala	Val	Asp	Cys	Ile	Trp	Thr	
				200					205					210	
Ile	Lys	Ala	Thr	Pro	Lys	Ala	Lys	Ile	Tyr	Leu	Arg	Phe	Leu	Asp	
				215					220					225	
Tyr	Gln	Met	Glu	His	Ser	Asn	Glu	Cys	Lys	Arg	Asn	Phe	Val	Ala	
				230					235					240	
Val	Tyr	Asp	Gly	Ser	Ser	Ser	Ile	Glu	Asn	Leu	Lys	Ala	Lys	Phe	
				245					250					255	
Cys	Ser	Thr	Val	Ala	Asn	Asp	Val	Met	Leu	Lys	Thr	Gly	Ile	Gly	
				260					265					270	
Val	Ile	Arg	Met	Trp	Ala	Asp	Glu	Gly	Ser	Arg	Leu	Ser	Arg	Phe	
				275					280					285	
Arg	Met	Leu	Phe	Thr	Ser	Phe	Val	Glu	Pro	Pro	Cys	Thr	Ser	Ser	
				290					295					300	
Thr	Phe	Phe	Cys	His	Ser	Asn	Met	Cys	Ile	Asn	Asn	Ser	Leu	Val	
				305					310					315	
Cys	Asn	Gly	Val	Gln	Asn	Cys	Ala	Tyr	Pro	Trp	Asp	Glu	Asn	His	
				320					325					330	
Cys	Lys	Glu	Lys	Lys	Lys	Ala	Gly	Val	Phe	Glu	Gln	Ile	Thr	Lys	
				335					340					345	
Thr	His	Gly	Thr	Ile	Ile	Gly	Ile	Thr	Ser	Gly	Ile	Val	Leu	Val	
				350					355					360	
Leu	Leu	Ile	Ile	Ser	Ile	Leu	Val	Gln	Val	Lys	Gln	Pro	Arg	Lys	

	365		370		375
Lys Val Met Ala Cys Lys Thr Ala Phe Asn Lys Thr Gly Phe Gln					
	380		385		390
Glu Val Phe Asp Pro Pro His Tyr Glu Leu Phe Ser Leu Arg Asp					
	395		400		405
Lys Glu Ile Ser Ala Asp Leu Ala Asp Leu Ser Glu Glu Leu Asp					
	410		415		420
Asn Tyr Gln Lys Met Arg Arg Ser Ser Thr Ala Ser Arg Cys Ile					
	425		430		435
His Asp His His Cys Gly Ser Gln Ala Ser Ser Val Lys Gln Ser					
	440		445		450
Arg Thr Asn Leu Ser Ser Met Glu Leu Pro Phe Arg Asn Asp Phe					
	455		460		465
Ala Gln Pro Gln Pro Met Lys Thr Phe Asn Ser Thr Phe Lys Lys					
	470		475		480
Ser Ser Tyr Thr Phe Lys Gln Gly His Glu Cys Pro Glu Gln Ala					
	485		490		495
Leu Glu Asp Arg Val Met Glu Glu Ile Pro Cys Glu Ile Tyr Val					
	500		505		510
Arg Gly Arg Glu Asp Ser Ala Gln Ala Ser Ile Ser Ile Asp Phe					
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 <212> DNA
 <213> Homo Sapien

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 gacagtgaag tttcagagag gaagatgatt tacatcatta caattgatgg 200
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 <211> 715
 <212> PRT
 <213> Homo Sapien

<400> 116
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 35 40 45
 Ile Tyr Ile Ile Thr Ile Asp Gly Gln Pro Tyr Thr Leu His Leu
 50 55 60
 Gly Lys Gln Ser Phe Leu Pro Gln Asn Phe Leu Val Tyr Thr Tyr
 65 70 75
 Asn Glu Thr Gly Ser Leu His Ser Val Ser Pro Tyr Phe Met Met
 80 85 90
 His Cys His Tyr Gln Gly Tyr Ala Ala Glu Phe Pro Asn Ser Phe
 95 100 105
 Val Thr Leu Ser Ile Cys Ser Gly Leu Arg Gly Phe Leu Gln Phe
 110 115 120
 Glu Asn Ile Ser Tyr Gly Ile Glu Pro Val Glu Ser Ser Ala Arg
 125 130 135
 Phe Glu His Ile Ile Tyr Gln Met Lys Asn Asn Asp Pro Asn Val
 140 145 150
 Ser Ile Leu Ala Val Asn Tyr Ser His Ile Trp Gln Lys Asp Gln
 155 160 165
 Pro Tyr Lys Val Pro Leu Asn Ser Gln Ile Lys Asn Leu Ser Lys
 170 175 180

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				185					190					195	
Leu	Met	Phe	Thr	Gln	Phe	Lys	Leu	Thr	Val	Ile	Leu	Ser	Ser	Leu	
				200					205					210	
Glu	Leu	Trp	Ser	Asn	Glu	Asn	Gln	Ile	Ser	Thr	Ser	Gly	Asp	Ala	
				215					220					225	
Asp	Asp	Ile	Leu	Gln	Arg	Phe	Leu	Ala	Trp	Lys	Arg	Asp	Tyr	Leu	
				230					235					240	
Ile	Leu	Arg	Pro	His	Asp	Ile	Ala	Tyr	Leu	Leu	Val	Tyr	Arg	Lys	
				245					250					255	
His	Pro	Lys	Tyr	Val	Gly	Ala	Thr	Phe	Pro	Gly	Thr	Val	Cys	Asn	
				260					265					270	
Lys	Ser	Tyr	Asp	Ala	Gly	Ile	Ala	Met	Tyr	Pro	Asp	Ala	Ile	Gly	
				275					280					285	
Leu	Glu	Gly	Phe	Ser	Val	Ile	Ile	Ala	Gln	Leu	Leu	Gly	Leu	Asn	
				290					295					300	
Val	Gly	Leu	Thr	Tyr	Asp	Asp	Ile	Thr	Gln	Cys	Phe	Cys	Leu	Arg	
				305					310					315	
Ala	Thr	Cys	Ile	Met	Asn	His	Glu	Ala	Val	Ser	Ala	Ser	Gly	Arg	
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Lys	Ile	Phe	Ser	Asn	Cys	Ser	Met	His	Asp	Tyr	Arg	Tyr	Phe	Val	
				335					340					345	
Ser	Lys	Phe	Glu	Thr	Lys	Cys	Leu	Gln	Lys	Leu	Ser	Asn	Leu	Gln	
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Pro	Leu	His	Gln	Asn	Gln	Pro	Val	Cys	Gly	Asn	Gly	Ile	Leu	Glu	
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Ser	Asn	Glu	Glu	Cys	Asp	Cys	Gly	Asn	Lys	Asn	Glu	Cys	Gln	Phe	
				380					385					390	
Lys	Lys	Cys	Cys	Asp	Tyr	Asn	Thr	Cys	Lys	Leu	Lys	Gly	Ser	Val	
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Lys	Cys	Gly	Ser	Gly	Pro	Cys	Cys	Thr	Ser	Lys	Cys	Glu	Leu	Ser	
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Ile	Ala	Gly	Thr	Pro	Cys	Arg	Lys	Ser	Ile	Asp	Pro	Glu	Cys	Asp	
				425					430					435	
Phe	Thr	Glu	Tyr	Cys	Asn	Gly	Thr	Ser	Ser	Asn	Cys	Val	Pro	Asp	
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Thr	Tyr	Ala	Leu	Asn	Gly	Arg	Leu	Cys	Lys	Leu	Gly	Thr	Ala	Tyr	
				455					460					465	
Cys	Tyr	Asn	Gly	Gln	Cys	Gln	Thr	Thr	Asp	Asn	Gln	Cys	Ala	Lys	

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 tgtattatth ttgagatgca ggaattactg taacaaaata tgtatgtccg 1300
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<210> 118

<211> 284

<212> PRT
 <213> Homo Sapien

<400> 118

Met	Pro	Arg	Tyr	Ala	Gln	Leu	Val	Met	Gly	Pro	Ala	Gly	Ser	Gly	1	5	10	15
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Asn	Arg	Ser	Val	Gln	Val	Val	Asn	Leu	Asp	Pro	Ala	Ala	Glu	His	35	40	45	
Phe	Asn	Tyr	Ser	Val	Met	Ala	Asp	Ile	Arg	Glu	Leu	Ile	Glu	Val	50	55	60	
Asp	Asp	Val	Met	Glu	Asp	Asp	Ser	Leu	Arg	Phe	Gly	Pro	Asn	Gly	65	70	75	
Gly	Leu	Val	Phe	Cys	Met	Glu	Tyr	Phe	Ala	Asn	Asn	Phe	Asp	Trp	80	85	90	
Leu	Glu	Asn	Cys	Leu	Gly	His	Val	Glu	Asp	Asp	Tyr	Ile	Leu	Phe	95	100	105	
Asp	Cys	Pro	Gly	Gln	Ile	Glu	Leu	Tyr	Thr	His	Leu	Pro	Val	Met	110	115	120	
Lys	His	Leu	Val	Gln	Gln	Leu	Glu	Gln	Trp	Glu	Phe	Arg	Val	Cys	125	130	135	
Gly	Val	Phe	Leu	Val	Asp	Ser	Gln	Phe	Met	Val	Glu	Ser	Phe	Lys	140	145	150	
Phe	Ile	Ser	Gly	Ile	Leu	Ala	Ala	Leu	Ser	Ala	Met	Ile	Ser	Leu	155	160	165	
Glu	Ile	Pro	Gln	Val	Asn	Ile	Met	Thr	Lys	Met	Asp	Leu	Leu	Ser	170	175	180	
Lys	Lys	Ala	Lys	Lys	Glu	Ile	Glu	Lys	Phe	Leu	Asp	Pro	Asp	Met	185	190	195	
Tyr	Ser	Leu	Leu	Glu	Asp	Ser	Thr	Ser	Asp	Leu	Arg	Ser	Lys	Lys	200	205	210	
Phe	Lys	Lys	Leu	Thr	Lys	Ala	Ile	Cys	Gly	Leu	Ile	Asp	Asp	Tyr	215	220	225	
Ser	Met	Val	Arg	Phe	Leu	Pro	Tyr	Asp	Gln	Ser	Asp	Glu	Glu	Ser	230	235	240	
Met	Asn	Ile	Val	Leu	Gln	His	Ile	Asp	Phe	Ala	Ile	Gln	Tyr	Gly	245	250	255	
Glu	Asp	Leu	Glu	Phe	Lys	Glu	Pro	Lys	Glu	Arg	Glu	Asp	Glu	Ser	260	265	270	

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 <211> 2868
 <212> DNA
 <213> Homo Sapien

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<210> 120
 <211> 775
 <212> PRT
 <213> Homo Sapien

<400> 120
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 35 40 45
 Thr Gly Ala Arg Ser Gly Leu Pro Arg Trp Asn Arg Arg Glu Val
 50 55 60
 Cys Leu Leu Ser Gly Leu Val Phe Ala Ala Gly Leu Cys Ala Ile
 65 70 75
 Leu Ala Ala Met Leu Ala Leu Lys Tyr Leu Gly Pro Val Ala Ala
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 Gly Gly Gly Ala Cys Pro Glu Gly Cys Pro Glu Arg Lys Ala Phe
 95 100 105
 Ala Arg Ala Ala Arg Phe Leu Ala Ala Asn Leu Asp Ala Ser Ile
 110 115 120
 Asp Pro Cys Gln Asp Phe Tyr Ser Phe Ala Cys Gly Gly Trp Leu
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 Arg Arg His Ala Ile Pro Asp Asp Lys Leu Thr Tyr Gly Thr Ile
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 Ala Ala Ile Gly Glu Gln Asn Glu Glu Arg Leu Arg Arg Leu Leu
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 Ala Arg Pro Gly Gly Gly Pro Gly Gly Ala Ala Gln Arg Lys Val
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 Trp Asp Leu Gly Gly Ala Glu Glu Arg Pro Gly Val Ala Ala Arg
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Ala	Ala	Ala	Leu	Phe	Ser	Leu	Thr	Val	Ser	Leu	Asp	Asp	Arg	Asn		
				245					250					255		
Ser	Ser	Arg	Tyr	Val	Ile	Arg	Ile	Asp	Gln	Asp	Gly	Leu	Thr	Leu		
				260					265					270		
Pro	Glu	Arg	Thr	Leu	Tyr	Leu	Ala	Gln	Asp	Glu	Asp	Ser	Glu	Lys		
				275					280					285		
Ile	Leu	Ala	Ala	Tyr	Arg	Val	Phe	Met	Glu	Arg	Val	Leu	Ser	Leu		
				290					295					300		
Leu	Gly	Ala	Asp	Ala	Val	Glu	Gln	Lys	Ala	Gln	Glu	Ile	Leu	Gln		
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Val	Glu	Gln	Gln	Leu	Ala	Asn	Ile	Thr	Val	Ser	Glu	Tyr	Asp	Asp		
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Leu	Arg	Arg	Asp	Val	Ser	Ser	Met	Tyr	Asn	Lys	Val	Thr	Leu	Gly		
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Gln	Leu	Gln	Lys	Ile	Thr	Pro	His	Leu	Arg	Trp	Lys	Trp	Leu	Leu		
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Asp	Gln	Ile	Phe	Gln	Glu	Asp	Phe	Ser	Glu	Glu	Glu	Glu	Val	Val		
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				380					385					390		
Ser	Thr	Pro	His	Arg	Val	Leu	His	Asn	Tyr	Leu	Val	Trp	Arg	Val		
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Leu	His	Glu	Leu	Ala	Gln	Glu	Met	Glu	Gly	Ser	Asp	Lys	Pro	Gln		
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Met	Ala	Leu	Gly	Ala	Leu	Phe	Val	His	Glu	His	Phe	Ser	Ala	Ala		
				455					460					465		
Ser	Lys	Ala	Lys	Val	Gln	Gln	Leu	Val	Glu	Asp	Ile	Lys	Tyr	Ile		
				470					475					480		
Leu	Gly	Gln	Arg	Leu	Glu	Glu	Leu	Asp	Trp	Met	Asp	Ala	Glu	Thr		
				485					490					495		
Arg	Ala	Ala	Ala	Arg	Ala	Lys	Leu	Gln	Tyr	Met	Met	Val	Met	Val		
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<400> 121

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<210> 122

<211> 511

<212> PRT

<213> Homo Sapien

<400> 122

Met	Glu	Ser	Thr	Gly	Ser	Val	Gly	Glu	Ala	Pro	Gly	Gly	Pro	Arg	1	5	10	15
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Arg	Leu	Cys	Gly	His	Ser	Ala	Phe	Pro	His	Leu	Arg	Val	Leu	Glu	35	40	45	
Ala	Thr	Ala	Arg	Ala	Gly	Gly	Arg	Ile	Arg	Ser	Glu	Arg	Cys	Phe	50	55	60	
Gly	Gly	Val	Val	Glu	Val	Gly	Ala	His	Trp	Ile	His	Gly	Pro	Ser	65	70	75	
Arg	Gly	Asn	Pro	Val	Phe	Gln	Leu	Ala	Ala	Glu	Tyr	Gly	Leu	Leu	80	85	90	
Gly	Glu	Lys	Glu	Leu	Ser	Gln	Glu	Asn	Gln	Leu	Val	Glu	Thr	Gly	95	100	105	
Gly	His	Val	Gly	Leu	Pro	Ser	Val	Ser	Tyr	Ala	Ser	Ser	Gly	Ala	110	115	120	
Ser	Val	Ser	Leu	Gln	Leu	Val	Ala	Glu	Met	Ala	Thr	Leu	Phe	Tyr	125	130	135	
Gly	Leu	Ile	Asp	Gln	Thr	Arg	Glu	Phe	Leu	His	Ala	Ala	Glu	Thr	140	145	150	
Pro	Val	Pro	Ser	Val	Gly	Glu	Tyr	Leu	Lys	Lys	Glu	Ile	Gly	Gln	155	160	165	
His	Val	Ala	Gly	Trp	Thr	Glu	Asp	Glu	Glu	Thr	Arg	Lys	Leu	Lys	170	175	180	

470	475	480
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Leu

<210> 123
 <211> 3479
 <212> DNA
 <213> Homo Sapien

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<210> 124
 <211> 535
 <212> PRT
 <213> Homo Sapien

<400> 124
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 35 40 45
 Pro Ile Leu Ala Leu Val Gly Glu Glu Val Glu Phe Pro Cys His
 50 55 60

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365	370	375
Leu Glu Arg Phe Ser Ala Gly Arg His	Tyr Trp Glu Val His Val	
380	385	390
Gly Arg Arg Ser Arg Trp Phe Leu Gly	Ala Cys Leu Ala Ala Val	
395	400	405
Pro Arg Ala Gly Pro Ala Arg Leu Ser	Pro Ala Ala Gly Tyr Trp	
410	415	420
Val Leu Gly Leu Trp Asn Gly Cys Glu	Tyr Phe Val Leu Ala Pro	
425	430	435
His Arg Val Ala Leu Thr Leu Arg Val	Pro Pro Arg Arg Leu Gly	
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Ala Leu Cys Ala Tyr Phe Arg Pro Arg	Ala His Asp Gly Gly Glu	
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His Pro Asp Pro Leu Thr Ile Cys Pro	Leu Pro Val Arg Gly Thr	
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 <211> 4374
 <212> DNA
 <213> Homo Sapien

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 <211> 451
 <212> PRT
 <213> Homo Sapien

<400> 126
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Gln	Ile	Ala	Lys	Asp	Phe	Ala	Ser	Phe	Pro	Ser	Ile	Asn	Leu	Gln	110	115	120
Gln	Met	Leu	Lys	Glu	Val	Pro	Lys	Arg	Phe	Gly	Asp	Glu	Arg	Gly	125	130	135
Ala	Ile	Val	His	Tyr	Thr	Ile	Leu	Asn	Asn	His	Val	Tyr	Arg	Arg	140	145	150
Ser	Leu	Gly	Lys	Tyr	Thr	Asp	Phe	Lys	Met	Phe	Ser	Asp	Glu	Ile	155	160	165
Leu	Leu	Ser	Leu	Thr	Arg	Lys	Val	Leu	Leu	Pro	Asp	Leu	Glu	Phe	170	175	180
Tyr	Val	Asn	Leu	Gly	Asp	Trp	Pro	Leu	Glu	His	Arg	Lys	Val	Asn	185	190	195
Gly	Thr	Pro	Ser	Pro	Ile	Pro	Ile	Ile	Ser	Trp	Cys	Gly	Ser	Leu	200	205	210
Asp	Ser	Arg	Asp	Val	Val	Leu	Pro	Thr	Tyr	Asp	Ile	Thr	His	Ser	215	220	225
Met	Leu	Glu	Ala	Met	Arg	Gly	Val	Thr	Asn	Asp	Leu	Leu	Ser	Ile	230	235	240
Gln	Gly	Asn	Thr	Gly	Pro	Ser	Trp	Ile	Asn	Lys	Thr	Glu	Arg	Ala	245	250	255
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Gln	Leu	Ser	Lys	Glu	Asn	Pro	Gln	Leu	Leu	Asp	Ala	Gly	Ile	Thr	275	280	285
Gly	Tyr	Phe	Phe	Phe	Gln	Glu	Lys	Glu	Lys	Glu	Leu	Gly	Lys	Ala	290	295	300
Lys	Leu	Met	Gly	Phe	Phe	Asp	Phe	Phe	Lys	Tyr	Lys	Tyr	Gln	Val	305	310	315
Asn	Val	Asp	Gly	Thr	Val	Ala	Ala	Tyr	Arg	Tyr	Pro	Tyr	Leu	Met			

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Leu Gly Asp Ser Leu Val Leu Lys Gln Asp Ser Pro Tyr Tyr Glu		
335	340	345
His Phe Tyr Met Ala Leu Glu Pro Trp Lys His Tyr Val Pro Ile		
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Lys Arg Asn Leu Ser Asp Leu Leu Glu Lys Val Lys Trp Ala Lys		
365	370	375
Glu Asn Asp Glu Glu Ala Lys Lys Ile Ala Lys Glu Gly Gln Leu		
380	385	390
Met Ala Arg Asp Leu Leu Gln Pro His Arg Leu Tyr Cys Tyr Tyr		
395	400	405
Tyr Gln Val Leu Gln Lys Tyr Ala Glu Arg Gln Ser Ser Lys Pro		
410	415	420
Glu Val Arg Asp Gly Met Glu Leu Val Pro Gln Pro Glu Asp Ser		
425	430	435
Thr Ala Ile Cys Gln Cys His Arg Lys Lys Pro Ser Arg Glu Glu		
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Leu		

<210> 127
 <211> 2163
 <212> DNA
 <213> Homo Sapien

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 <211> 575
 <212> PRT
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 35 40 45
 Pro Pro Gly Thr Met Val Thr Ala Pro His Ser Ser Thr Arg His
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 Thr Ser Val Val Met Leu Thr Pro Asn Pro Asp Gly Pro Pro Ser
 65 70 75
 Gln Ala Ala Ala Pro Met Ala Thr Leu Thr Pro Arg Ala Glu Gly
 80 85 90
 His Pro Pro Thr His Thr Ile Ser Thr Ile Ala Ala Thr Val Thr
 95 100 105
 Ala Pro Tyr Ser Glu Ser Ser Leu Ser Thr Gly Pro Ala Pro Ala
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 Ala Met Ala Thr Thr Ser Ser Lys Pro Glu Gly Arg Pro Arg Gly
 125 130 135
 Gln Ala Ala Pro Thr Ile Leu Leu Thr Lys Pro Pro Gly Ala Thr
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 Ser Arg Pro Thr Thr Ala Pro Pro Arg Thr Thr Thr Arg Arg Pro
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 170 175 180
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 200 205 210
 Arg Pro Leu Gly Lys Ile Phe Gln Ile Tyr Lys Gly Asn Phe Thr
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 Gly Ser Val Glu Pro Glu Pro Ser Thr Leu Thr Pro Arg Thr Pro

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Pro	Arg	Ser	Pro	Ala	Asn	Gly	Asp	Tyr	Arg	Asp	Thr	Gly	Met	Val
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Leu	Val	Asn	Pro	Phe	Cys	Gln	Glu	Thr	Leu	Phe	Val	Gly	Asn	Asp
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<210> 129

<211> 2334

<212> DNA

<213> Homo Sapien

<400> 129

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<400> 130

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Pro	Tyr	Ser	Val	Arg	Ile	Pro	Glu	Asn	Thr	Pro	Val	Gly	Thr	Pro
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Ile	Phe	Ile	Val	Asn	Ala	Thr	Asp	Pro	Asp	Leu	Gly	Ala	Gly	Gly
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Asp	Ser	Ala	Arg	Gly	Ile	Val	Thr	Val	Ile	Arg	Glu	Leu	Asp	Tyr
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Glu	Thr	Thr	Gln	Ala	Tyr	Gln	Leu	Thr	Val	Asn	Ala	Thr	Asp	Gln
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Asp	Lys	Thr	Arg	Pro	Leu	Ser	Thr	Leu	Ala	Asn	Leu	Ala	Ile	Ile
				215					220					225
Ile	Thr	Asp	Val	Gln	Asp	Met	Asp	Pro	Ile	Phe	Ile	Asn	Leu	Pro
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Tyr	Ser	Thr	Asn	Ile	Tyr	Glu	His	Ser	Pro	Pro	Gly	Thr	Thr	Val
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Arg	Ile	Ile	Thr	Ala	Ile	Asp	Gln	Asp	Lys	Gly	Arg	Pro	Arg	Gly
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Ile	Gly	Tyr	Thr	Ile	Val	Ser	Gly	Asn	Thr	Asn	Ser	Ile	Phe	Ala
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ggagaaaactc tggctctggg gcttggggct tctcaggatc ctggatggca 1150
gagactgccc tcagaagttc cttgtccagg gtgggcaccc acagtgactc 1200
agaggacagg gctaggcagg agacctgctg ctctcattg gggggatctc 1250
ttggggggca gacaccagtt tgccaatgaa gcaacacatc tgatctaaag 1300
actggctcca gacccccggc tgccaggatt atgcagtcca cttgggtctac 1350
cttaatttaa cctgtggcca aactcagaga tggtagcagc caggggcaag 1400
catgaccaga gccagggacc ctgtggctct gatccccat ttatccaccc 1450
catgtgcctc aggactagag tgagcaatca taccttataa atgacttttg 1500

tgcctttctg ctccagtctc aaaatttcct acacctgccca gttctttaca 1550
 tttttccaag gaaaggaaaa cggaagcagg gttcttgccct ggtagctcca 1600
 ggacccagct ctgcaggcac ccaaagaccc tctgtgcccc gcctcttcct 1650
 tgagttctcg gaacctctc cctaattctc ccttccttcc ccacaaggcc 1700
 tttgaggttg tgactgtggc tggatatctt ggctgccatt tttctgatgc 1750
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 ttcctaatag ctgacttttt aataaagcag ttttatatat 1840

<210> 132

<211> 333

<212> PRT

<213> Homo Sapien

<400> 132

Met	Leu	Met	Phe	Ala	Val	Ile	Val	Ala	Ser	Ser	Gly	Leu	Leu	Leu	1	5	10	15
Met	Ile	Glu	Arg	Gly	Ile	Leu	Ala	Glu	Met	Lys	Pro	Leu	Pro	Leu	20	25	30	
His	Pro	Pro	Gly	Arg	Glu	Gly	Thr	Ala	Trp	Arg	Gly	Lys	Ala	Pro	35	40	45	
Lys	Pro	Gly	Gly	Leu	Ser	Leu	Arg	Ala	Gly	Asp	Ala	Asp	Leu	Gln	50	55	60	
Val	Arg	Gln	Asp	Val	Arg	Asn	Arg	Thr	Leu	Arg	Ala	Val	Cys	Gly	65	70	75	
Gln	Pro	Gly	Met	Pro	Arg	Asp	Pro	Trp	Asp	Leu	Pro	Val	Gly	Gln	80	85	90	
Arg	Arg	Thr	Leu	Leu	Arg	His	Ile	Leu	Val	Ser	Asp	Arg	Tyr	Arg	95	100	105	
Phe	Leu	Tyr	Cys	Tyr	Val	Pro	Lys	Val	Ala	Cys	Ser	Asn	Trp	Lys	110	115	120	
Arg	Val	Met	Lys	Val	Leu	Ala	Gly	Val	Leu	Asp	Ser	Val	Asp	Val	125	130	135	
Arg	Leu	Lys	Met	Asp	His	Arg	Ser	Asp	Leu	Val	Phe	Leu	Ala	Asp	140	145	150	
Leu	Arg	Pro	Glu	Glu	Ile	Arg	Tyr	Arg	Leu	Gln	His	Tyr	Phe	Lys	155	160	165	
Phe	Leu	Phe	Val	Arg	Glu	Pro	Leu	Glu	Arg	Leu	Leu	Ser	Ala	Tyr	170	175	180	
Arg	Asn	Lys	Phe	Gly	Glu	Ile	Arg	Glu	Tyr	Gln	Gln	Arg	Tyr	Gly	185	190	195	

Ala	Glu	Ile	Val	Arg	Arg	Tyr	Arg	Ala	Gly	Ala	Gly	Pro	Ser	Pro	
				200					205					210	
Ala	Gly	Asp	Asp	Val	Thr	Phe	Pro	Glu	Phe	Leu	Arg	Tyr	Leu	Val	
				215					220					225	
Asp	Glu	Asp	Pro	Glu	Arg	Met	Asn	Glu	His	Trp	Met	Pro	Val	Tyr	
				230					235					240	
His	Leu	Cys	Gln	Pro	Cys	Ala	Val	His	Tyr	Asp	Phe	Val	Gly	Ser	
				245					250					255	
Tyr	Glu	Arg	Leu	Glu	Ala	Asp	Ala	Asn	Gln	Val	Leu	Glu	Trp	Val	
				260					265					270	
Arg	Ala	Pro	Pro	His	Val	Arg	Phe	Pro	Ala	Arg	Gln	Ala	Trp	Tyr	
				275					280					285	
Arg	Pro	Ala	Ser	Pro	Glu	Ser	Leu	His	Tyr	His	Leu	Cys	Ser	Ala	
				290					295					300	
Pro	Arg	Ala	Leu	Leu	Gln	Asp	Val	Leu	Pro	Lys	Tyr	Ile	Leu	Asp	
				305					310					315	
Phe	Ser	Leu	Phe	Ala	Tyr	Pro	Leu	Pro	Asn	Val	Thr	Lys	Glu	Ala	
				320					325					330	

Cys Gln Gln

<210> 133
 <211> 1636
 <212> DNA
 <213> Homo Sapien

<400> 133
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 agtgctgttt ctggtattct catcgcggtc acctctaccg gtgtggacaa 100
 gtaaagtttg aatcagcttc tccatggcct gggcaccagt tcccggctga 150
 gccatthttcc ttttggttaa aagtccccgc ccagaggcca attcgtcgcg 200
 gcggcgggtg agatcgcagg tcgctcaggc ttgcagatgg gtcaagggtt 250
 gtggagagtg gtcagaaacc agcagctgca acaagaaggc tacagtgagc 300
 aaggctacct caccagagag cagagcagga gaatggatgc gagcaacatt 350
 tctaacacca atcatcgtaa acaagtccaa ggaggcattg acatatatca 400
 tcttttgaag gcaaggaaat cgaaagaaca ggaaggattc attaatttgg 450
 aaatgttgcc tcctgagcta agctttacca tcttgtccta cctgaatgca 500
 actgaccttt gcttggtctc atgtgtttgg caggaccttg cgaatgatga 550

<211> 1675
 <212> DNA
 <213> Homo Sapien

<400> 135

```

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gctgaggcca ccatctgctc tcttactggc caagggcgta aaaagatagt 100

cttcccatta gctagagagc aaaccccaga aagcctattg gctgcgccgt 150

ccgcgggcct tgggtccgctt tgaaggcggg ctgcggctgc gagaggaggg 200

cgggcgggag gctagctggt gtcgtgggtg ctgcggaggca cgtgtgcagt 250

cccggaagcg gcgaggggaa actgctccgc gcgcgccgcg ggaggaggaa 300

ccgcccggtc ctttagggtc cgggcccggc cgggccatgg attcaatgcc 350

tgagcccgcg tcccgtgtc ttctgcttct tcccttgctg ctgctgctgc 400

tgctgctgct gccggccccg gagctgggcc cgagccaggc cggagctgag 450

gagaacgact gggttcgctt gccagcaaa tgcaagtgt gtaaatatgt 500

tgctgtggag ctgaagtcag cctttgagga aaccggcaag accaaggagg 550

tgattggcac gggctatggc atcctggacc agaaggcctc tggagtcaaa 600

tacaccaagt cggacttgcg gttaatcgaa gtcactgaga ccatttgcaa 650

gaggctcctg gattatagcc tgcacaagga gaggaccggc agcaatcgat 700

ttgccaaggg catgtcagag acctttgaga cattacacaa cctggtacac 750

aaaggggtca aggtggtgat ggacatcccc tatgagctgt ggaacgagac 800

ttctgcagag gtggctgacc tcaagaagca gtgtgatgtg ctggtggaag 850

agtttgagga ggtgatcgag gactggtaca ggaaccacca ggaggaagac 900

ctgactgaat tcctctgcgc caaccacgtg ctgaagggaa aagacaccag 950

ttgcctggca gagcagtggg ccggcaagaa gggagacaca gctgccctgg 1000

gagggaaagaa gtccaagaag aagagcagca gggccaaggc agcaggcggc 1050

aggagtagca gcagcaaaca aaggaaggag ctgggtggcc ttgagggaga 1100

ccccagcccc gaggaggatg agggcatcca gaaggcatcc cctctcacac 1150

acagcccccc tgatgagctc tgagcccacc cagcatcctc tgtcctgaga 1200

cccctgattt tgaagctgag gagtcagggg catggctctg gcaggccggg 1250

atggccccgc agccttcagc ccctccttgc cttggctgtg ccctcttctg 1300

ccaaggaaaag acacaagccc caggaagaac tcagagccgt catgggtagc 1350

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aggcaggcct tgtggtttca ggactgcaag gactccagtg tgaactcagg 1450
aggggcaggt gtcagaactg ggcaccagga ctggagcccc ctccggagac 1500
caaactcacc atccctcagt cctccccaac aggggtactag gactgcagcc 1550
ccctgtagct cctctctgct taccctcct gtggacacct tgcactctgc 1600
ctggcccttc ccagagccca aagagtaaaa atgttctggt tctgatttct 1650
gaaaaaaaaa aaaaaaaaaa ttcct 1675

<210> 136
<211> 278
<212> PRT
<213> Homo Sapien

<400> 136
Met Asp Ser Met Pro Glu Pro Ala Ser Arg Cys Leu Leu Leu Leu
1 5 10 15
Pro Leu Leu Leu Leu Leu Leu Leu Leu Leu Pro Ala Pro Glu Leu
20 25 30
Gly Pro Ser Gln Ala Gly Ala Glu Glu Asn Asp Trp Val Arg Leu
35 40 45
Pro Ser Lys Cys Glu Val Cys Lys Tyr Val Ala Val Glu Leu Lys
50 55 60
Ser Ala Phe Glu Glu Thr Gly Lys Thr Lys Glu Val Ile Gly Thr
65 70 75
Gly Tyr Gly Ile Leu Asp Gln Lys Ala Ser Gly Val Lys Tyr Thr
80 85 90
Lys Ser Asp Leu Arg Leu Ile Glu Val Thr Glu Thr Ile Cys Lys
95 100 105
Arg Leu Leu Asp Tyr Ser Leu His Lys Glu Arg Thr Gly Ser Asn
110 115 120
Arg Phe Ala Lys Gly Met Ser Glu Thr Phe Glu Thr Leu His Asn
125 130 135
Leu Val His Lys Gly Val Lys Val Val Met Asp Ile Pro Tyr Glu
140 145 150
Leu Trp Asn Glu Thr Ser Ala Glu Val Ala Asp Leu Lys Lys Gln
155 160 165
Cys Asp Val Leu Val Glu Glu Phe Glu Glu Val Ile Glu Asp Trp
170 175 180
Tyr Arg Asn His Gln Glu Glu Asp Leu Thr Glu Phe Leu Cys Ala
185 190 195

Asn	His	Val	Leu	Lys	Gly	Lys	Asp	Thr	Ser	Cys	Leu	Ala	Glu	Gln
				200					205					210
Trp	Ser	Gly	Lys	Lys	Gly	Asp	Thr	Ala	Ala	Leu	Gly	Gly	Lys	Lys
				215					220					225
Ser	Lys	Lys	Lys	Ser	Ser	Arg	Ala	Lys	Ala	Ala	Gly	Gly	Arg	Ser
				230					235					240
Ser	Ser	Ser	Lys	Gln	Arg	Lys	Glu	Leu	Gly	Gly	Leu	Glu	Gly	Asp
				245					250					255
Pro	Ser	Pro	Glu	Glu	Asp	Glu	Gly	Ile	Gln	Lys	Ala	Ser	Pro	Leu
				260					265					270
Thr	His	Ser	Pro	Pro	Asp	Glu	Leu							
				275										

<210> 137
 <211> 2207
 <212> DNA
 <213> Homo Sapien

<220>
 <221> unsure
 <222> 2153, 2160
 <223> unknown base

<400> 137
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 aaactcatta gctccacagc aatgagtcct cactgctga agcttggcgc 100
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 catccttggg gggactgaac accacgaggc tgcgactcc ggatacctta 200
 actcagatta gtcctaaaga aggggtggcag gtgtacagct cagctcagga 250
 tcctgatggg cgggtgcattt gcacagttgt tgctccagaa caaacctgt 300
 gttcccggga tgccaaaagc aggcaacttc gccaaactact ggaaaagggt 350
 cagaacatgt cccagtctat tgaagtctta aacttgagaa ctgagagaga 400
 tttccaatat gttttaaaaa tggaaacca aatgaaaggg ctgaaggcaa 450
 aatttcggca gattgaagat gatcgaaaga cacttatgac caagcatttt 500
 caggagtga aagagaaaat ggacgagctc ctgccttga tccccgtgct 550
 ggaacagtac aaaacagatg ctaagttaat caccagttc aaggaggaaa 600
 taaggaatct gtctgctgtc ctactggta ttcaggagga aattggtgcc 650
 tatgactacg aggaactaca ccaaagagtg ctgagcttgg aaacaagact 700
 tcgtgactgc atgaaaaagc taacatgtgg caaactgatg aaaatcacag 750

gccagttac agtcaagaca tctggaaccc gatttggtgc ttggatgaca 800
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 tactaacaat aaaattgttc gtgaatacaa atcaattgca gactttgtca 900
 gtggggctga atcaaggaca tacaaccttc ctttcaagtg ggcaggaaact 950
 aaccatgttg tctacaatgg ctcaactctat ttttaacaagt atcagagtaa 1000
 tatcatcatc aaatacagct ttgatatggg gagagtgcctt gccaacgaa 1050
 gcctggagta tgctgggttt cataatgttt acccctacac atgggggtgga 1100
 ttctctgaca tcgacctaag ggctgatgaa atcgggctgt gggctgtgta 1150
 tgcaactaac cagaatgcag gcaatattgt catcagccaa cttaaccaag 1200
 ataccttggg ggtgatgaag agctggagca ctggctaccc caagagaagt 1250
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 aaaagagttt aagtggctaa agtcatagtt ttgcaagaga ttaatgatct 1800
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 ctttaaaaaa tgtaaggatt tcattttatat tgaaaaataa tattaatcat 2000
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 aanacactgn aatttttaaa aaaaaaaaaa aaaacaaaaa aaaaaaaaaa 2200

aaaaaaa 2207

<210> 138

<211> 478

<212> PRT

<213> Homo Sapien

<400> 138

Met Ser Pro Pro Leu Leu Lys Leu Gly Ala Val Leu Ser Thr Met
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Ala Met Ile Ser Asn Trp Met Ser Gln Thr Leu Pro Ser Leu Val
20 25 30

Gly Leu Asn Thr Thr Arg Leu Ser Thr Pro Asp Thr Leu Thr Gln
35 40 45

Ile Ser Pro Lys Glu Gly Trp Gln Val Tyr Ser Ser Ala Gln Asp
50 55 60

Pro Asp Gly Arg Cys Ile Cys Thr Val Val Ala Pro Glu Gln Asn
65 70 75

Leu Cys Ser Arg Asp Ala Lys Ser Arg Gln Leu Arg Gln Leu Leu
80 85 90

Glu Lys Val Gln Asn Met Ser Gln Ser Ile Glu Val Leu Asn Leu
95 100 105

Arg Thr Gln Arg Asp Phe Gln Tyr Val Leu Lys Met Glu Thr Gln
110 115 120

Met Lys Gly Leu Lys Ala Lys Phe Arg Gln Ile Glu Asp Asp Arg
125 130 135

Lys Thr Leu Met Thr Lys His Phe Gln Glu Leu Lys Glu Lys Met
140 145 150

Asp Glu Leu Leu Pro Leu Ile Pro Val Leu Glu Gln Tyr Lys Thr
155 160 165

Asp Ala Lys Leu Ile Thr Gln Phe Lys Glu Glu Ile Arg Asn Leu
170 175 180

Ser Ala Val Leu Thr Gly Ile Gln Glu Glu Ile Gly Ala Tyr Asp
185 190 195

Tyr Glu Glu Leu His Gln Arg Val Leu Ser Leu Glu Thr Arg Leu
200 205 210

Arg Asp Cys Met Lys Lys Leu Thr Cys Gly Lys Leu Met Lys Ile
215 220 225

Thr Gly Pro Val Thr Val Lys Thr Ser Gly Thr Arg Phe Gly Ala
230 235 240

Trp Met Thr Asp Pro Leu Ala Ser Glu Lys Asn Asn Arg Val Trp
245 250 255

Tyr Met Asp Ser Tyr Thr Asn Asn Lys Ile Val Arg Glu Tyr Lys
260 265 270

Ser Ile Ala Asp Phe Val Ser Gly Ala Glu Ser Arg Thr Tyr Asn
275 280 285

Leu Pro Phe Lys Trp Ala Gly Thr Asn His Val Val Tyr Asn Gly
290 295 300

Ser Leu Tyr Phe Asn Lys Tyr Gln Ser Asn Ile Ile Ile Lys Tyr
305 310 315

Ser Phe Asp Met Gly Arg Val Leu Ala Gln Arg Ser Leu Glu Tyr
320 325 330

Ala Gly Phe His Asn Val Tyr Pro Tyr Thr Trp Gly Gly Phe Ser
335 340 345

Asp Ile Asp Leu Met Ala Asp Glu Ile Gly Leu Trp Ala Val Tyr
350 355 360

Ala Thr Asn Gln Asn Ala Gly Asn Ile Val Ile Ser Gln Leu Asn
365 370 375

Gln Asp Thr Leu Glu Val Met Lys Ser Trp Ser Thr Gly Tyr Pro
380 385 390

Lys Arg Ser Ala Gly Glu Ser Phe Met Ile Cys Gly Thr Leu Tyr
395 400 405

Val Thr Asn Ser His Leu Thr Gly Ala Lys Val Tyr Tyr Ser Tyr
410 415 420

Ser Thr Lys Thr Ser Thr Tyr Glu Tyr Thr Asp Ile Pro Phe His
425 430 435

Asn Gln Tyr Phe His Ile Ser Met Leu Asp Tyr Asn Ala Arg Asp
440 445 450

Arg Ala Leu Tyr Ala Trp Asn Asn Gly His Gln Val Leu Phe Asn
455 460 465

Val Thr Leu Phe His Ile Ile Lys Thr Glu Asp Asp Thr
470 475

<210> 139

<211> 1971

<212> DNA

<213> Homo Sapien

<400> 139

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ccactgcctg tatagctgcc actggaggaa atgccccaga gagaggatgc 150

aaaccagcaa gtgcgactgt atctggtttg gcctgctctt cctcaccttc 200

ctcctttccc tgagctggct gtacatcggg ctgctccttc tcaatgacct 250
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ggccccctggc attcctgctg gtcattctctc tactggtcac atatgcatcc 350
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tccaccgaag aggtcccaag attctgctac tgctcctatt ttttgagatt 650
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caacgacggg cacctggaat gcgccagata tatggacgtc agggaggcaa 1300
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ggatcaacaa tttcatgatg gagtgaatgc cctgccctgc ttccccaccc 1700
 aagccagtct acattgccca aacagcaagg gttggagagt ggcttaagtg 1750
 gaatgcttca ggggtggtgg gttgcaagtg gggggagctt tgccaacagg 1800
 aggttttgaa ccatgagggc cctctgccca ggtgatgggc attccctaag 1850
 ctgctatgga atctgctccc tttgggggtt tgacctgaga tgtttgggaa 1900
 gagagtgagt aatgagaagt ttctcctcaa atgaaactag aacagaggaa 1950
 gtaaaaggga gattgctcgg a 1971

<210> 140
 <211> 539
 <212> PRT
 <213> Homo Sapien

<400> 140
 Met Ala Glu Ser Pro Gly Cys Cys Ser Val Trp Ala Arg Cys Leu
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 His Cys Leu Tyr Ser Cys His Trp Arg Lys Cys Pro Arg Glu Arg
 20 25 30
 Met Gln Thr Ser Lys Cys Asp Cys Ile Trp Phe Gly Leu Leu Phe
 35 40 45
 Leu Thr Phe Leu Leu Ser Leu Ser Trp Leu Tyr Ile Gly Leu Val
 50 55 60
 Leu Leu Asn Asp Leu His Asn Phe Asn Glu Phe Leu Phe Arg Arg
 65 70 75
 Trp Gly His Trp Met Asp Trp Ser Leu Ala Phe Leu Leu Val Ile
 80 85 90
 Ser Leu Leu Val Thr Tyr Ala Ser Leu Leu Leu Val Leu Ala Leu
 95 100 105
 Leu Leu Arg Leu Cys Arg Gln Pro Leu His Leu His Ser Leu His
 110 115 120
 Lys Val Leu Leu Leu Leu Ile Met Leu Leu Val Ala Ala Gly Leu
 125 130 135
 Val Gly Leu Asp Ile Gln Trp Gln Gln Glu Trp His Ser Leu Arg
 140 145 150
 Val Ser Leu Gln Ala Thr Ala Pro Phe Leu His Ile Gly Ala Ala
 155 160 165
 Ala Gly Ile Ala Leu Leu Ala Trp Pro Val Ala Asp Thr Phe Tyr
 170 175 180
 Arg Ile His Arg Arg Gly Pro Lys Ile Leu Leu Leu Leu Leu Phe
 185 190 195

Phe Gly Val Val	Leu Val Ile Tyr Leu	Ala Pro Leu Cys Ile	Ser
200	205	210	
Ser Pro Cys Ile	Met Glu Pro Arg Asp	Leu Pro Pro Lys Pro	Gly
215	220	225	
Leu Val Gly His	Arg Gly Ala Pro Met	Leu Ala Pro Glu Asn Thr	
230	235	240	
Leu Met Ser Leu	Arg Lys Thr Ala Glu	Cys Gly Ala Thr Val	Phe
245	250	255	
Glu Thr Asp Val	Met Val Ser Ser Asp	Gly Val Pro Phe Leu	Met
260	265	270	
His Asp Glu His	Leu Ser Arg Thr Thr	Asn Val Ala Ser Val	Phe
275	280	285	
Pro Thr Arg Ile	Thr Ala His Ser Ser	Asp Phe Ser Trp Thr	Glu
290	295	300	
Leu Lys Arg Leu	Asn Ala Gly Ser Trp	Phe Leu Glu Arg Arg	Pro
305	310	315	
Phe Trp Gly Ala	Lys Pro Leu Ala Gly	Pro Asp Gln Lys Glu	Ala
320	325	330	
Glu Ser Gln Thr	Val Pro Ala Leu Glu	Glu Leu Leu Glu Glu	Ala
335	340	345	
Ala Ala Leu Asn	Leu Ser Ile Met Phe	Asp Leu Arg Arg Pro	Pro
350	355	360	
Gln Asn His Thr	Tyr Tyr Asp Thr Phe	Val Ile Gln Thr Leu	Glu
365	370	375	
Thr Val Leu Asn	Ala Arg Val Pro Gln	Ala Met Val Phe Trp	Leu
380	385	390	
Pro Asp Glu Asp	Arg Ala Asn Val Gln	Arg Arg Ala Pro Gly	Met
395	400	405	
Arg Gln Ile Tyr	Gly Arg Gln Gly Gly	Asn Arg Thr Glu Arg	Pro
410	415	420	
Gln Phe Leu Asn	Leu Pro Tyr Gln Asp	Leu Pro Leu Leu Asp	Ile
425	430	435	
Lys Ala Leu His	Lys Asp Asn Val Ser	Val Asn Leu Phe Val	Val
440	445	450	
Asn Lys Pro Trp	Leu Phe Ser Leu Leu	Trp Cys Ala Gly Val	Asp
455	460	465	
Ser Val Thr Thr	Asn Asp Cys Gln Leu	Leu Gln Gln Met Arg	Tyr
470	475	480	
Pro Ile Trp Leu	Ile Thr Pro Gln Thr	Tyr Leu Ile Ile Trp	Val

	485		490		495
Ile Thr Asn Cys Val Ser Thr Met Leu Leu Leu Trp Thr Phe Leu					
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Leu Gln Arg Arg Phe Val Lys Lys Arg Gly Lys Thr Gly Leu Glu					
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<210> 141

<211> 3671

<212> DNA

<213> Homo Sapien

<400> 141

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<211> 1036

<212> PRT

<213> Homo Sapien

<400> 142

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Gly	Thr	Arg	Ala	Leu	Val	Cys	Leu	Pro	Cys	Asp	Glu	Ser	Lys	Cys	20	25	30
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Thr	Leu	Pro	Thr	Arg	Cys	Glu	Cys	Leu	Ser	Gly	Leu	Cys	Gly	Phe			
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Pro	Ser	Glu	Asp	Ser	Ser	Leu	Asp	Ser	Ile	Ala	Ser	Val	Val	Val	
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Pro	Ile	Ile	Ile	Cys	Leu	Ser	Ile	Ile	Ile	Ala	Phe	Leu	Phe	Ile	
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Cys	Lys	Lys	Gly	Thr	Arg	Val	Gln	Val	Asp	Ser	Ser	Gln	Arg	Met	
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Leu	Arg	Ile	Ala	Glu	Pro	Asp	Ala	Arg	Phe	Ser	Gly	Phe	Tyr	Ser	
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Met	Gln	Lys	Gln	Asn	His	Leu	Gln	Ala	Asp	Asn	Phe	Tyr	Gln	Thr	
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 <212> DNA
 <213> Homo Sapien

<400> 143
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 <212> PRT
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<400> 144

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Cys	Gly	Val	Thr	Asp	Thr	Asn	Ser	Tyr	Ala	Ala	Trp	Ala	Glu	Arg	95	100	105	
Ile	Ser	Asp	Leu	Phe	Ala	Arg	His	Arg	Thr	Lys	Met	Arg	Arg	Lys	110	115	120	
Lys	Arg	Phe	Ala	Lys	Gln	Gly	Asn	Lys	Trp	Tyr	Lys	Gln	His	Leu	125	130	135	
Ser	Tyr	Arg	Leu	Val	Asn	Trp	Pro	Glu	His	Leu	Pro	Glu	Pro	Ala	140	145	150	
Val	Arg	Gly	Ala	Val	Arg	Ala	Ala	Phe	Gln	Leu	Trp	Ser	Asn	Val	155	160	165	
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Pro	Arg	Arg	Gly	Glu	Ala	His	Phe	Asp	Gln	Asp	Glu	Arg	Trp	Ser	215	220	225	
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Ala	Arg	Tyr	Tyr	Val	Leu	Ala	Arg	Gly	Gly	Leu	Gln	Val	Glu	Pro					
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 <212> DNA
 <213> Homo Sapien

<400> 145

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<210> 146
 <211> 945
 <212> PRT
 <213> Homo Sapien

<400> 146
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 Gly Ser Glu Val Leu Pro Asp Ser Phe Pro Ser Ala Pro Ala Glu
 35 40 45
 Pro Leu Pro Tyr Phe Leu Gln Glu Pro Gln Asp Ala Tyr Ile Val
 50 55 60

Lys	Asn	Lys	Pro	Val	Glu	Leu	Arg	Cys	Arg	Ala	Phe	Pro	Ala	Thr	65	70	75
Gln	Ile	Tyr	Phe	Lys	Cys	Asn	Gly	Glu	Trp	Val	Ser	Gln	Asn	Asp	80	85	90
His	Val	Thr	Gln	Glu	Gly	Leu	Asp	Glu	Ala	Thr	Gly	Leu	Arg	Val	95	100	105
Arg	Glu	Val	Gln	Ile	Glu	Val	Ser	Arg	Gln	Gln	Val	Glu	Glu	Leu	110	115	120
Phe	Gly	Leu	Glu	Asp	Tyr	Trp	Cys	Gln	Cys	Val	Ala	Trp	Ser	Ser	125	130	135
Ala	Gly	Thr	Thr	Lys	Ser	Arg	Arg	Ala	Tyr	Val	Arg	Ile	Ala	Tyr	140	145	150
Leu	Arg	Lys	Asn	Phe	Asp	Gln	Glu	Pro	Leu	Gly	Lys	Glu	Val	Pro	155	160	165
Leu	Asp	His	Glu	Val	Leu	Leu	Gln	Cys	Arg	Pro	Pro	Glu	Gly	Val	170	175	180
Pro	Val	Ala	Glu	Val	Glu	Trp	Leu	Lys	Asn	Glu	Asp	Val	Ile	Asp	185	190	195
Pro	Thr	Gln	Asp	Thr	Asn	Phe	Leu	Leu	Thr	Ile	Asp	His	Asn	Leu	200	205	210
Ile	Ile	Arg	Gln	Ala	Arg	Leu	Ser	Asp	Thr	Ala	Asn	Tyr	Thr	Cys	215	220	225
Val	Ala	Lys	Asn	Ile	Val	Ala	Lys	Arg	Arg	Ser	Thr	Thr	Ala	Thr	230	235	240
Val	Ile	Val	Tyr	Val	Asn	Gly	Gly	Trp	Ser	Ser	Trp	Ala	Glu	Trp	245	250	255
Ser	Pro	Cys	Ser	Asn	Arg	Cys	Gly	Arg	Gly	Trp	Gln	Lys	Arg	Thr	260	265	270
Arg	Thr	Cys	Thr	Asn	Pro	Ala	Pro	Leu	Asn	Gly	Gly	Ala	Phe	Cys	275	280	285
Glu	Gly	Gln	Ala	Phe	Gln	Lys	Thr	Ala	Cys	Thr	Thr	Ile	Cys	Pro	290	295	300
Val	Asp	Gly	Ala	Trp	Thr	Glu	Trp	Ser	Lys	Trp	Ser	Ala	Cys	Ser	305	310	315
Thr	Glu	Cys	Ala	His	Trp	Arg	Ser	Arg	Glu	Cys	Met	Ala	Pro	Pro	320	325	330
Pro	Gln	Asn	Gly	Gly	Arg	Asp	Cys	Ser	Gly	Thr	Leu	Leu	Asp	Ser	335	340	345
Lys	Asn	Cys	Thr	Asp	Gly	Leu	Cys	Met	Gln	Asn	Lys	Lys	Thr	Leu			

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Leu Tyr Ala Gly	Leu Val Val Ala Ile	Phe Val Val Val Ala	Ile		
	380		385		390
Leu Met Ala Val	Gly Val Val Val Tyr	Arg Arg Asn Cys Arg	Asp		
	395		400		405
Phe Asp Thr Asp	Ile Thr Asp Ser Ser	Ala Ala Leu Thr Gly	Gly		
	410		415		420
Phe His Pro Val	Asn Phe Lys Thr Ala	Arg Pro Ser Asn Pro	Gln		
	425		430		435
Leu Leu His Pro	Ser Val Pro Pro Asp	Leu Thr Ala Ser Ala	Gly		
	440		445		450
Ile Tyr Arg Gly	Pro Val Tyr Ala Leu	Gln Asp Ser Thr Asp	Lys		
	455		460		465
Ile Pro Met Thr	Asn Ser Pro Leu Leu	Asp Pro Leu Pro Ser	Leu		
	470		475		480
Lys Val Lys Val	Tyr Ser Ser Ser Thr	Thr Gly Ser Gly Pro	Gly		
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Leu Ala Asp Gly	Ala Asp Leu Leu Gly	Val Leu Pro Pro Gly	Thr		
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Tyr Pro Ser Asp	Phe Ala Arg Asp Thr	His Phe Leu His Leu	Arg		
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Ser Ala Ser Leu	Gly Ser Gln Gln Leu	Leu Gly Leu Pro Arg	Asp		
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Pro Gly Ser Ser	Val Ser Gly Thr Phe	Gly Cys Leu Gly Gly	Arg		
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Leu Ser Ile Pro	Gly Thr Gly Val Ser	Leu Leu Val Pro Asn	Gly		
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Ala Ile Pro Gln	Gly Lys Phe Tyr Glu	Met Tyr Leu Leu Ile	Asn		
	575		580		585
Lys Ala Glu Ser	Thr Leu Pro Leu Ser	Glu Gly Thr Gln Thr	Val		
	590		595		600
Leu Ser Pro Ser	Val Thr Cys Gly Pro	Thr Gly Leu Leu Leu	Cys		
	605		610		615
Arg Pro Val Ile	Leu Thr Met Pro His	Cys Ala Glu Val Ser	Ala		
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Arg Asp Trp Ile	Phe Gln Leu Lys Thr	Gln Ala His Gln Gly	His		
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Trp	Glu	Glu	Val	Val	Thr	Leu	Asp	Glu	Glu	Thr	Leu	Asn	Thr	Pro	650	655	660
Cys	Tyr	Cys	Gln	Leu	Glu	Pro	Arg	Ala	Cys	His	Ile	Leu	Leu	Asp	665	670	675
Gln	Leu	Gly	Thr	Tyr	Val	Phe	Thr	Gly	Glu	Ser	Tyr	Ser	Arg	Ser	680	685	690
Ala	Val	Lys	Arg	Leu	Gln	Leu	Ala	Val	Phe	Ala	Pro	Ala	Leu	Cys	695	700	705
Thr	Ser	Leu	Glu	Tyr	Ser	Leu	Arg	Val	Tyr	Cys	Leu	Glu	Asp	Thr	710	715	720
Pro	Val	Ala	Leu	Lys	Glu	Val	Leu	Glu	Leu	Glu	Arg	Thr	Leu	Gly	725	730	735
Gly	Tyr	Leu	Val	Glu	Glu	Pro	Lys	Pro	Leu	Met	Phe	Lys	Asp	Ser	740	745	750
Tyr	His	Asn	Leu	Arg	Leu	Ser	Leu	His	Asp	Leu	Pro	His	Ala	His	755	760	765
Trp	Arg	Ser	Lys	Leu	Leu	Ala	Lys	Tyr	Gln	Glu	Ile	Pro	Phe	Tyr	770	775	780
His	Ile	Trp	Ser	Gly	Ser	Gln	Lys	Ala	Leu	His	Cys	Thr	Phe	Thr	785	790	795
Leu	Glu	Arg	His	Ser	Leu	Ala	Ser	Thr	Glu	Leu	Thr	Cys	Lys	Ile	800	805	810
Cys	Val	Arg	Gln	Val	Glu	Gly	Glu	Gly	Gln	Ile	Phe	Gln	Leu	His	815	820	825
Thr	Thr	Leu	Ala	Glu	Thr	Pro	Ala	Gly	Ser	Leu	Asp	Thr	Leu	Cys	830	835	840
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Phe	Lys	Ile	Pro	Leu	Ser	Ile	Arg	Gln	Lys	Ile	Cys	Asn	Ser	Leu	860	865	870
Asp	Ala	Pro	Asn	Ser	Arg	Gly	Asn	Asp	Trp	Arg	Met	Leu	Ala	Gln	875	880	885
Lys	Leu	Ser	Met	Asp	Arg	Tyr	Leu	Asn	Tyr	Phe	Ala	Thr	Lys	Ala	890	895	900
Ser	Pro	Thr	Gly	Val	Ile	Leu	Asp	Leu	Trp	Glu	Ala	Leu	Gln	Gln	905	910	915
Asp	Asp	Gly	Asp	Leu	Asn	Ser	Leu	Ala	Ser	Ala	Leu	Glu	Glu	Met	920	925	930
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935

940

945

<210> 147
 <211> 3734
 <212> DNA
 <213> Homo Sapien

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aaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaa 3734

<210> 148
<211> 834
<212> PRT
<213> Homo Sapien

<400> 148
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20 25 30
Lys Phe Leu Gly Pro Ala Glu His Leu Thr Phe Thr Pro Ala Ala
35 40 45
Arg Ala Arg Trp Leu Ala Pro Arg Val Arg Ala Pro Gly Leu Leu

[illegible]

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Ala Gln Ala Gln Asp Asn Ser Val Leu	Gly Gln Arg Leu Gln Glu	
650	655	660
Glu Ala Gln Gly Leu Arg Asn Leu His	Gln Glu Lys Val Val Pro	
665	670	675
Gln Gln Ser Leu Val Ala Lys Leu Asn	Leu Ser Val Arg Ala Leu	
680	685	690
Glu Ser Ser Ala Pro Asn Leu Gln Leu	Glu Thr Ser Asp Val Leu	
695	700	705
Ala Asn Val Thr Tyr Leu Lys Gly Glu	Leu Pro Ala Trp Ala Ala	
710	715	720
Arg Ile Leu Arg Asn Val Ser Glu Cys	Phe Leu Ala Arg Glu Met	
725	730	735
Gly Tyr Phe Ser Gln Tyr Val Ala Trp	Val Arg Glu Glu Val Thr	
740	745	750
Gln Arg Ile Ala Thr Cys Gln Pro Leu	Ser Gly Ala Leu Asp Asn	
755	760	765
Ser Arg Val Ile Leu Cys Asp Met Met	Ala Asp Pro Trp Asn Ala	
770	775	780
Phe Trp Phe Cys Leu Ala Trp Cys Thr	Phe Phe Leu Ile Pro Ser	
785	790	795
Ile Ile Phe Ala Val Lys Thr Ser Lys	Tyr Phe Arg Pro Ile Arg	
800	805	810
Lys Arg Leu Ser Ser Thr Ser Ser Glu	Glu Thr Gln Leu Phe His	
815	820	825
Ile Pro Arg Val Thr Ser Leu Lys Leu		
830		

<210> 149

<211> 804

<212> DNA

<213> Homo Sapien

<400> 149

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<210> 150
 <211> 81
 <212> PRT
 <213> Homo Sapien

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 Ala Trp Ser Gly Arg Arg Thr Arg Leu Cys Cys His Arg Val Pro
 35 40 45
 Ser Pro Asn Ser Thr Asn Leu Lys Gly His His Val Arg Leu Cys
 50 55 60
 Lys Pro Cys Lys Leu Glu Pro Glu Pro Arg Leu Trp Val Val Pro
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 Gly Ala Leu Pro Gln Val
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<210> 151
 <211> 2164
 <212> DNA
 <213> Homo Sapien

<400> 151
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155	160	165
Pro Glu Val Phe	Ser Ala Ser Val Thr	Thr Asn His Ser Ser Thr
170	175	180
Val Thr Ser Thr	Gln Pro Thr Gly Ala	Pro Thr Ala Pro Glu Ser
185	190	195
Pro Thr Glu Glu	Ser Ser Ser Asp His	Thr Pro Thr Ser His Ala
200	205	210
Thr Ala Glu Pro	Val Pro Gln Glu Lys	Thr Pro Pro Thr Thr Val
215	220	225
Ser Gly Lys Val	Met Cys Glu Leu Ile	Asp Met Glu Thr Thr Thr
230	235	240
Thr Phe Pro Arg	Val Ile Met Gln Glu	Val Glu His Ala Leu Ser
245	250	255
Ser Gly Ser Ile	Ala Ala Ile Thr Val	Thr Val Ile Ala Val Val
260	265	270
Leu Leu Val Phe	Gly Val Ala Ala Tyr	Leu Lys Ile Arg His Ser
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Ser Tyr Gly Arg	Leu Leu Asp Asp His	Asp Tyr Gly Ser Trp Gly
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<210> 153
 <211> 755
 <212> DNA
 <213> Homo Sapien

<220>
 <221> unsure
 <222> 67
 <223> unknown base

<400> 153
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<210> 154
 <211> 105
 <212> PRT
 <213> Homo Sapien

<400> 154
 Met Leu Val His Cys Val Gly Leu Leu Leu Thr Gly Leu Leu Leu
 1 5 10 15
 Gly Leu Thr Leu Gly Ala Gly Ala Leu Leu Ala Ser Glu Pro Ile
 20 25 30
 Tyr Gln Pro Pro Ser Ala Trp Val Pro Ala Gly Gly Leu Val Gly
 35 40 45
 Leu Ala Leu Leu Gly Ala Leu Leu Thr Leu Arg Trp Pro Arg Pro
 50 55 60
 Phe Thr Val Leu Gly Thr Thr Leu Leu Gly Ser Ala Val Leu Val
 65 70 75
 Ala Cys Val Asp Tyr Phe Leu Glu Gly Leu Ala Leu Gly Ser Trp
 80 85 90
 Leu Gly Gln Arg Leu Gln Thr Leu Pro Ala Leu Pro Ser Leu Cys
 95 100 105

<210> 155
 <211> 1825
 <212> DNA
 <213> Homo Sapien

<400> 155
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 gacatttccc ttgtacctgc tgaactttct gggcttgtgg agctggatat 150

gcaaaaaatg gttcccctac ttcttggtga ggttcactgt gatatacaac 200
gaacagatgg caagcaagaa gcgggagctc ttcagtaacc tgcaggagtt 250
tgcgggcccc tccgggaaac tctccctgct ggaagtgggc tgtggcacgg 300
gggccaactt caagttctac ccacctgggt gcagggtgac ctgtattgac 350
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acacctgcag tttgagcgtt ttgtggtagc tgccggggag aacatgcacc 450
aggtggctga tggctctgtg gatgtgggtg tctgcaccct ggtgctgtgc 500
tctgtgaaga accaggagcg gattctccgc gaggtgtgca gagtgtgag 550
accgggaggg gctttctatt tcatggagca tgtggcagct gagtgttcca 600
cttgaatta cttctggcaa caagtcctgg atcctgcctg gcaccttctg 650
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gcagttaaga gctgaatggc tcaaagaatt taaagcttca gttttacatt 850
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ccctgttgga agatgatttc tttgttcttt gcaactatgg aagctgtgaa 1650
aatcatcaca agtgcctctg aaagcgagtg ttaggttggt tagaggggtt 1700
aatattttct gcaatgggtt gtaggaattt taataaatgt agtatatttt 1750
ctgagatgat tttgtaaaag tactattttta aatatcaa at caaccaataa 1800
attcacattt gtgttaggaa caaaa 1825

<210> 156
<211> 244
<212> PRT
<213> Homo Sapien

<400> 156
Met Glu Leu Thr Ile Phe Ile Leu Arg Leu Ala Ile Tyr Ile Leu
1 5 10 15
Thr Phe Pro Leu Tyr Leu Leu Asn Phe Leu Gly Leu Trp Ser Trp
20 25 30
Ile Cys Lys Lys Trp Phe Pro Tyr Phe Leu Val Arg Phe Thr Val
35 40 45
Ile Tyr Asn Glu Gln Met Ala Ser Lys Lys Arg Glu Leu Phe Ser
50 55 60
Asn Leu Gln Glu Phe Ala Gly Pro Ser Gly Lys Leu Ser Leu Leu
65 70 75
Glu Val Gly Cys Gly Thr Gly Ala Asn Phe Lys Phe Tyr Pro Pro
80 85 90
Gly Cys Arg Val Thr Cys Ile Asp Pro Asn Pro Asn Phe Glu Lys
95 100 105
Phe Leu Ile Lys Ser Ile Ala Glu Asn Arg His Leu Gln Phe Glu
110 115 120
Arg Phe Val Val Ala Ala Gly Glu Asn Met His Gln Val Ala Asp
125 130 135
Gly Ser Val Asp Val Val Val Cys Thr Leu Val Leu Cys Ser Val
140 145 150
Lys Asn Gln Glu Arg Ile Leu Arg Glu Val Cys Arg Val Leu Arg
155 160 165
Pro Gly Gly Ala Phe Tyr Phe Met Glu His Val Ala Ala Glu Cys
170 175 180
Ser Thr Trp Asn Tyr Phe Trp Gln Gln Val Leu Asp Pro Ala Trp
185 190 195
His Leu Leu Phe Asp Gly Cys Asn Leu Thr Arg Glu Ser Trp Lys
200 205 210

Ala	Leu	Glu	Arg	Ala	Ser	Phe	Ser	Lys	Leu	Lys	Leu	Gln	His	Ile
				215					220					225

Gln	Ala	Pro	Leu	Ser	Trp	Glu	Leu	Val	Arg	Pro	His	Ile	Tyr	Gly
				230					235					240

Tyr Ala Val Lys

<210> 157

<211> 1328

<212> DNA

<213> Homo Sapien

<400> 157

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tgcttcattc tccaccgcgc ctatgggtccc tcttggagcc agcgtggcgg 150
gcctggcggc tcccgggtgg tgagagagcg gtccgggaac gatgaaggcc 200
tcgcagtget gctgctgtct cagccacctc ttggcttcgg tcctcctcct 250
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ggctgaagct gcggggccgc ggggctccga gggaggcaat ggcagcaacc 450
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tcggtgggtg gcggccttgc tgtgagcccc aaccctggcg acaagcccat 550
gaccagcgg gccctgaccg tgttgatggt ggtgagcggc gcggtgctgg 600
tgtacttcgt ggtcaggacg gtcaggatga gaagaagaaa ccgaaagact 650
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atgattttta atttctcttaa aaaaaaaaa 1328

<210> 158

<211> 190

<212> PRT

<213> Homo Sapien

<400> 158

Met	Lys	Ala	Ser	Gln	Cys	Cys	Cys	Cys	Leu	Ser	His	Leu	Leu	Ala	1	5	10	15
Ser	Val	Leu	Leu	Leu	Leu	Leu	Leu	Pro	Glu	Leu	Ser	Gly	Pro	Leu	20	25	30	
Ala	Val	Leu	Leu	Gln	Ala	Ala	Glu	Ala	Ala	Pro	Gly	Leu	Gly	Pro	35	40	45	
Pro	Asp	Pro	Arg	Pro	Arg	Thr	Leu	Pro	Pro	Leu	Pro	Pro	Gly	Pro	50	55	60	
Thr	Pro	Ala	Gln	Gln	Pro	Gly	Arg	Gly	Leu	Ala	Glu	Ala	Ala	Gly	65	70	75	
Pro	Arg	Gly	Ser	Glu	Gly	Gly	Asn	Gly	Ser	Asn	Pro	Val	Ala	Gly	80	85	90	
Leu	Glu	Thr	Asp	Asp	His	Gly	Gly	Lys	Ala	Gly	Glu	Gly	Ser	Val	95	100	105	
Gly	Gly	Gly	Leu	Ala	Val	Ser	Pro	Asn	Pro	Gly	Asp	Lys	Pro	Met	110	115	120	
Thr	Gln	Arg	Ala	Leu	Thr	Val	Leu	Met	Val	Val	Ser	Gly	Ala	Val	125	130	135	
Leu	Val	Tyr	Phe	Val	Val	Arg	Thr	Val	Arg	Met	Arg	Arg	Arg	Asn	140	145	150	
Arg	Lys	Thr	Arg	Arg	Tyr	Gly	Val	Leu	Asp	Thr	Asn	Ile	Glu	Asn	155	160	165	
Met	Glu	Leu	Thr	Pro	Leu	Glu	Gln	Asp	Asp	Glu	Asp	Asp	Asp	Asn	170	175	180	
Thr	Leu	Phe	Asp	Ala	Asn	His	Pro	Arg	Arg						185	190		

<210> 159

<211> 2167

<212> DNA

<213> Homo Sapien

<400> 159

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tcctgggtgc ctgtgtggct gggctgatg agcctggccc agagggcctc 150
acctccacct ccctgctaga cctcctgctg ccactggct tggagccact 200
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cagccaccac agtacttctg ggaagaggag gaagagctga atgactcaag 350
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aagaggtaga gaaacaagag gaggaggaag aggaggagct gctccctgtg 600
aatggatccc aagaagaagc caagcctcag gtccgtgact tttctctcac 650
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cctgtttctc atctgtggct tctgaaacac ttagactctg gaccagcaa 1250
gagtttcagg aagtgggttg ctaggcagtt agacaggctt gttggtgaac 1300
accgggtatg tagttccatt tcagcacaat aaaaagaaat cttgcattca 1350
agatgctaaa ttgtttttta cgaaaa 1376

<210> 162
<211> 343
<212> PRT
<213> Homo Sapien

<400> 162
Met Ala Gly Leu Asn Cys Gly Val Ser Ile Ala Leu Leu Gly Val
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Leu Leu Leu Gly Ala Ala Arg Leu Pro Arg Gly Ala Glu Ala Phe

Cys Asp Gln Asp Ala Gln Ser Pro Gly Ile Leu Arg Leu Gln Phe
 320 325 330

Gln Val Leu Val Gln His Pro Gln Asn Glu Ser Ser Glu
 335 340

<210> 163
 <211> 1968
 <212> DNA
 <213> Homo Sapien

<400> 163
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 cagagagggg aggatacaga cttgggaggg cagagactca gaaacagaat 1100
 gttcgcatca gggacatggt gttgcgggga gctgcctccc ccagcccctg 1150

Gly Glu Ala Gln Arg Val Arg Leu Arg Asp Arg Gln Arg Glu Thr
 95 100 105
 Val Arg Gly Glu Arg Leu Lys Asp His Glu Asn Asn Arg Asp Leu
 110 115 120
 Gly Thr Glu Arg His Arg Gln Gly Lys Thr Ala Gly Gln Arg Leu
 125 130 135
 Arg Glu Gly Arg Met Glu Ser Gln Arg Gly Glu Asp Gly Asp Ser
 140 145 150
 Glu Arg Gly Glu Asp Gly Asp Ser Glu Arg Glu Glu Asp Gly Asp
 155 160 165
 Ser Glu Gly Lys Met Glu Thr Gln Glu Tyr Gly Glu Ser Glu Arg
 170 175 180
 Gly Gly Trp Thr Leu Arg Gly Gly Trp Arg Val Arg Arg Met Glu
 185 190 195
 Thr His Arg Lys Gly Arg Met Glu Ser Gln Glu Arg Leu Glu Thr
 200 205 210
 Gly Glu Gly Ile Glu Thr Gln Lys Gly Glu Asp Gly Asp Ser Glu
 215 220 225
 Gly Gly Arg Trp Arg Leu Lys Glu Asp Gly Asn Pro Glu Arg Gly
 230 235 240
 Gly Gln Arg

<210> 165
 <211> 1941
 <212> DNA
 <213> Homo Sapien

<400> 165
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 tggaccctgc cagcagccag gccatggagc tctctgatgt caccctcatt 150
 gagggtgtgg gtaatgaggt gatggtggtg gcaggtgtgg tgggtgctgat 200
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 aactgaactc ccccatccat cagagggtaa tgatgagaag gctgaagagg 400
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gggtcagtgt ctgtgactga ataaagtcc attttgtgga aaaaaaaaaa 1900
aaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa a 1941

<210> 166
 <211> 301
 <212> PRT
 <213> Homo Sapien

<400> 166

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Val	Met	Val	Val	Ala	Gly	Val	Val	Val	Leu	Ile	Leu	Ala	Leu	Val	20	25	30	
Leu	Ala	Trp	Leu	Ser	Thr	Tyr	Val	Ala	Asp	Ser	Gly	Ser	Asn	Gln	35	40	45	
Leu	Leu	Gly	Ala	Ile	Val	Ser	Ala	Gly	Asp	Thr	Ser	Val	Leu	His	50	55	60	
Leu	Gly	His	Val	Asp	His	Leu	Val	Ala	Gly	Gln	Gly	Asn	Pro	Glu	65	70	75	
Pro	Thr	Glu	Leu	Pro	His	Pro	Ser	Glu	Gly	Asn	Asp	Glu	Lys	Ala	80	85	90	
Glu	Glu	Ala	Gly	Glu	Gly	Arg	Gly	Asp	Ser	Thr	Gly	Glu	Ala	Gly	95	100	105	
Ala	Gly	Gly	Gly	Val	Glu	Pro	Ser	Leu	Glu	His	Leu	Leu	Asp	Ile	110	115	120	
Gln	Gly	Leu	Pro	Lys	Arg	Gln	Ala	Gly	Ala	Gly	Ser	Ser	Ser	Pro	125	130	135	
Glu	Ala	Pro	Leu	Arg	Ser	Glu	Asp	Ser	Thr	Cys	Leu	Pro	Pro	Ser	140	145	150	
Pro	Gly	Leu	Ile	Thr	Val	Arg	Leu	Lys	Phe	Leu	Asn	Asp	Thr	Glu	155	160	165	
Glu	Leu	Ala	Val	Ala	Arg	Pro	Glu	Asp	Thr	Val	Gly	Ala	Leu	Lys	170	175	180	
Ser	Lys	Tyr	Phe	Pro	Gly	Gln	Glu	Ser	Gln	Met	Lys	Leu	Ile	Tyr	185	190	195	
Gln	Gly	Arg	Leu	Leu	Gln	Asp	Pro	Ala	Arg	Thr	Leu	Arg	Ser	Leu	200	205	210	
Asn	Ile	Thr	Asp	Asn	Cys	Val	Ile	His	Cys	His	Arg	Ser	Pro	Pro	215	220	225	
Gly	Ser	Ala	Val	Pro	Gly	Pro	Ser	Ala	Ser	Leu	Ala	Pro	Ser	Ala	230	235	240	
Thr	Glu	Pro	Pro	Ser	Leu	Gly	Val	Asn	Val	Gly	Ser	Leu	Met	Val	245	250	255	
Pro	Val	Phe	Val	Val	Leu	Leu	Gly	Val	Val	Trp	Tyr	Phe	Arg	Ile				

	260		265		270
Asn Tyr Arg Gln Phe Phe Thr Ala Pro		Ala Thr Val Ser Leu Val			
	275		280		285
Gly Val Thr Val Phe Phe Ser Phe Leu		Val Phe Gly Met Tyr Gly			
	290		295		300

Arg

<210> 167
 <211> 3323
 <212> DNA
 <213> Homo Sapien

<400> 167
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 tcaataaatg tttgtttaat gaa 3323

<210> 168
 <211> 196
 <212> PRT
 <213> Homo Sapien

<400> 168
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 Val Ala Phe Ile Thr Leu Ala Val Ala Ala Gly Leu Tyr Tyr Leu
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 Ala Glu Leu Ile Glu Glu Tyr Thr Val Ala Thr Ser Arg Ile Ile
 35 40 45
 Lys Tyr Met Ile Trp Phe Ser Thr Ala Val Leu Ile Gly Leu Tyr
 50 55 60
 Val Phe Glu Arg Phe Pro Thr Ser Met Ile Gly Val Gly Leu Phe
 65 70 75
 Thr Asn Leu Val Tyr Phe Gly Leu Leu Gln Thr Phe Pro Phe Ile
 80 85 90

Met	Leu	Thr	Ser	Pro	Asn	Phe	Ile	Leu	Ser	Cys	Gly	Leu	Val	Val
				95					100					105
Val	Asn	His	Tyr	Leu	Ala	Phe	Gln	Phe	Phe	Ala	Glu	Glu	Tyr	Tyr
				110					115					120
Pro	Phe	Ser	Glu	Val	Leu	Ala	Tyr	Phe	Thr	Phe	Cys	Leu	Trp	Ile
				125					130					135
Ile	Pro	Phe	Ala	Phe	Phe	Val	Ser	Leu	Ser	Ala	Gly	Glu	Asn	Val
				140					145					150
Leu	Pro	Ser	Thr	Met	Gln	Pro	Gly	Asp	Asp	Val	Val	Ser	Asn	Tyr
				155					160					165
Phe	Thr	Lys	Gly	Lys	Arg	Gly	Lys	Arg	Leu	Gly	Ile	Leu	Val	Val
				170					175					180
Phe	Ser	Phe	Ile	Lys	Glu	Ala	Ile	Leu	Pro	Ser	Arg	Gln	Lys	Ile
				185					190					195

Tyr

<210> 169
 <211> 1664
 <212> DNA
 <213> Homo Sapien

<400> 169
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 aggtgggctg aggttagaag gtgcagagcg tggaagaaga ttgtgagctg 100
 agtattggac atctgttctt gaatagtccc tgggcctgcc ataggaaagg 150
 aagttctcca gggttacagt tcttatccgc gtgaatacac atggctctgt 200
 tacgaaaaat taatcaggtg ctgctgttcc ttctgatcgt gaccctctgt 250
 gtgattctgt ataagaaagt tcataagggg actgtgcccc agaatagacgc 300
 agatgatgaa tccgagactc ctgaagaact ggaagaagag attcctgtgg 350
 tgatttgtgc tgcagcaggg aggatgggtg ccactatggc tgccatcaat 400
 agcatctaca gcaacactga cgccaacatc ttgttctatg tagtgggact 450
 ccggaatact ctgactcgaa tacgaaaatg gattgaacat tccaaactga 500
 gagaaataaa ctttaaaatc gtggaattca acccgatggg cctcaaaggg 550
 aagatcagac cagactcatc gaggcctgaa ttgctccagc ctctgaactt 600
 tgttcgattt tatctccctc tacttatcca ccaacacgag aaagtcattt 650
 atttgacga tgatgtaatt gtacaagggt atatccaaga actgtatgac 700

accaccttgg ccctgggccca cgcggcggct ttctcagatg actgcgattt 750
 gccctctgct caggacataa acagactcgt gggacttcag aacacatata 800
 tgggctatct ggactaccgg aagaaggcca tcaaggacct tggcatcagc 850
 cccagcacct gctctttcaa tcctgggtgtg attgttgcca acatgacaga 900
 atggaagcac cagcgcacatca ccaagcaatt ggagaaatgg atgcaaaaga 950
 atgtggagga aaacctctat agcagctccc tgggaggagg ggtggccacc 1000
 tccccaatgc tgattgtgtt tcatgggaaa tattccacaa ttaaccccct 1050
 gtggcacata aggcacctgg gctggaatcc agatgccaga tattcggagc 1100
 attttctgca ggaagctaaa ttactccact ggaatggaag acataaacct 1150
 tgggacttcc ctagtgttca caacgactta tgggaaagct ggtttgttcc 1200
 tgaccctgca gggatattta aactcaatca ccatagctga tataactcta 1250
 cccttaaaat attccctgta tagaaatgtg gaattgtccc tttgtagcca 1300
 actataacat tgttctttat gaatattacc tttgatacat atgatccaca 1350
 atataaaaac caaaaactac tgtgtgcaaa ttataccttg gaccatatag 1400
 gcattgatta acttctttta gtacatgtga taactatgga aatcaagatt 1450
 atgtgactga aaaacataaa ggaagagacc catctagata acagcaatca 1500
 acctgcttaa ttctgaatga caattatata cacaattttt taaaacttct 1550
 acatgtatatt ttcacatgaa gatctcctta acaggttgcc aaccttttct 1600
 tttataaaaac tattacattt aaaatatgga cgtctgaaaa ataaaatatt 1650
 catcattttt aaaa 1664

<210> 170

<211> 349

<212> PRT

<213> Homo Sapien

<400> 170

Met	Ala	Leu	Leu	Arg	Lys	Ile	Asn	Gln	Val	Leu	Leu	Phe	Leu	Leu
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Ile	Val	Thr	Leu	Cys	Val	Ile	Leu	Tyr	Lys	Lys	Val	His	Lys	Gly
			20						25				30	
Thr	Val	Pro	Lys	Asn	Asp	Ala	Asp	Asp	Glu	Ser	Glu	Thr	Pro	Glu
			35						40				45	
Glu	Leu	Glu	Glu	Glu	Ile	Pro	Val	Val	Ile	Cys	Ala	Ala	Ala	Gly
			50						55				60	

Arg	Met	Gly	Ala	Thr	Met	Ala	Ala	Ile	Asn	Ser	Ile	Tyr	Ser	Asn	
				65					70					75	
Thr	Asp	Ala	Asn	Ile	Leu	Phe	Tyr	Val	Val	Gly	Leu	Arg	Asn	Thr	
				80					85					90	
Leu	Thr	Arg	Ile	Arg	Lys	Trp	Ile	Glu	His	Ser	Lys	Leu	Arg	Glu	
				95					100					105	
Ile	Asn	Phe	Lys	Ile	Val	Glu	Phe	Asn	Pro	Met	Val	Leu	Lys	Gly	
				110					115					120	
Lys	Ile	Arg	Pro	Asp	Ser	Ser	Arg	Pro	Glu	Leu	Leu	Gln	Pro	Leu	
				125					130					135	
Asn	Phe	Val	Arg	Phe	Tyr	Leu	Pro	Leu	Leu	Ile	His	Gln	His	Glu	
				140					145					150	
Lys	Val	Ile	Tyr	Leu	Asp	Asp	Asp	Val	Ile	Val	Gln	Gly	Asp	Ile	
				155					160					165	
Gln	Glu	Leu	Tyr	Asp	Thr	Thr	Leu	Ala	Leu	Gly	His	Ala	Ala	Ala	
				170					175					180	
Phe	Ser	Asp	Asp	Cys	Asp	Leu	Pro	Ser	Ala	Gln	Asp	Ile	Asn	Arg	
				185					190					195	
Leu	Val	Gly	Leu	Gln	Asn	Thr	Tyr	Met	Gly	Tyr	Leu	Asp	Tyr	Arg	
				200					205					210	
Lys	Lys	Ala	Ile	Lys	Asp	Leu	Gly	Ile	Ser	Pro	Ser	Thr	Cys	Ser	
				215					220					225	
Phe	Asn	Pro	Gly	Val	Ile	Val	Ala	Asn	Met	Thr	Glu	Trp	Lys	His	
				230					235					240	
Gln	Arg	Ile	Thr	Lys	Gln	Leu	Glu	Lys	Trp	Met	Gln	Lys	Asn	Val	
				245					250					255	
Glu	Glu	Asn	Leu	Tyr	Ser	Ser	Ser	Leu	Gly	Gly	Gly	Val	Ala	Thr	
				260					265					270	
Ser	Pro	Met	Leu	Ile	Val	Phe	His	Gly	Lys	Tyr	Ser	Thr	Ile	Asn	
				275					280					285	
Pro	Leu	Trp	His	Ile	Arg	His	Leu	Gly	Trp	Asn	Pro	Asp	Ala	Arg	
				290					295					300	
Tyr	Ser	Glu	His	Phe	Leu	Gln	Glu	Ala	Lys	Leu	Leu	His	Trp	Asn	
				305					310					315	
Gly	Arg	His	Lys	Pro	Trp	Asp	Phe	Pro	Ser	Val	His	Asn	Asp	Leu	
				320					325					330	
Trp	Glu	Ser	Trp	Phe	Val	Pro	Asp	Pro	Ala	Gly	Ile	Phe	Lys	Leu	
				335					340					345	
Asn	His	His	Ser												

<210> 171
 <211> 756
 <212> DNA
 <213> Homo Sapien

<400> 171
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 tcttgataaa tgcaatgcct gcatcgggac atctatttgc aagaagttct 250
 ttaaagaaga aataagatct gacaactggc tggcttccca ccttggactg 300
 cctcccgatt ccttgctttc ttatcctgca aattactcag atgattccaa 350
 aatctggcgc cctgtggaga tcttttagact ggtcagcaaa tatcaaaacg 400
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 agcattgagc gtgtcctgcg gaaaacagag aggttccaga aatggctgca 500
 ggccaagcgc ctcacgccgg acctggtgca ggactgtcac cagggccaga 550
 gagaactaaa gttcctgtgt atgctgagat aacaccagtg aaaaagcctg 600
 gcatggagcc cagcactgag aacttccaga aagtgttagc cttctcccaa 650
 ctgtgttata ccaaccacat tttcaaatag taatcattaa agaggcttct 700
 gcatcaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 750
 aaaaaa 756

<210> 172
 <211> 182
 <212> PRT
 <213> Homo Sapien

<400> 172
 Met Glu Pro Gln Leu Gly Pro Glu Ala Ala Ala Leu Arg Pro Gly
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 Trp Leu Ala Leu Leu Leu Trp Val Ser Ala Leu Ser Cys Ser Phe
 20 25 30
 Ser Leu Pro Ala Ser Ser Leu Ser Ser Leu Val Pro Gln Val Arg
 35 40 45
 Thr Ser Tyr Asn Phe Gly Arg Thr Phe Leu Gly Leu Asp Lys Cys
 50 55 60
 Asn Ala Cys Ile Gly Thr Ser Ile Cys Lys Lys Phe Phe Lys Glu

	65		70		75
Glu Ile Arg Ser Asp Asn Trp Leu Ala Ser His Leu Gly Leu Pro					
	80		85		90
Pro Asp Ser Leu Leu Ser Tyr Pro Ala Asn Tyr Ser Asp Asp Ser					
	95		100		105
Lys Ile Trp Arg Pro Val Glu Ile Phe Arg Leu Val Ser Lys Tyr					
	110		115		120
Gln Asn Glu Ile Ser Asp Arg Arg Ile Cys Ala Ser Ala Ser Ala					
	125		130		135
Pro Lys Thr Cys Ser Ile Glu Arg Val Leu Arg Lys Thr Glu Arg					
	140		145		150
Phe Gln Lys Trp Leu Gln Ala Lys Arg Leu Thr Pro Asp Leu Val					
	155		160		165
Gln Asp Cys His Gln Gly Gln Arg Glu Leu Lys Phe Leu Cys Met					
	170		175		180
Leu Arg					

<210> 173
 <211> 1210
 <212> DNA
 <213> Homo Sapien

<400> 173
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 actctgtcgt cgcttaaggc cactcctatt ctacggctga cccctggtgg 150
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 aatccccgac agccctgctc cctgcagcca ggtgtagttt cgggagccac 450
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 aacccaaaagt 1210

<210> 174
 <211> 182
 <212> PRT
 <213> Homo Sapien

<400> 174
 Met Lys Gly Trp Gly Trp Leu Ala Leu Leu Leu Gly Ala Leu Leu
 1 5 10 15
 Gly Thr Ala Trp Ala Arg Arg Ser Gln Asp Leu His Cys Gly Ala
 20 25 30
 Cys Arg Ala Leu Val Asp Glu Leu Glu Trp Glu Ile Ala Gln Val
 35 40 45
 Asp Pro Lys Lys Thr Ile Gln Met Gly Ser Phe Arg Ile Asn Pro
 50 55 60
 Asp Gly Ser Gln Ser Val Val Glu Val Pro Tyr Ala Arg Ser Glu
 65 70 75
 Ala His Leu Thr Glu Leu Leu Glu Glu Ile Cys Asp Arg Met Lys
 80 85 90
 Glu Tyr Gly Glu Gln Ile Asp Pro Ser Thr His Arg Lys Asn Tyr
 95 100 105
 Val Arg Val Val Gly Arg Asn Gly Glu Ser Ser Glu Leu Asp Leu
 110 115 120
 Gln Gly Ile Arg Ile Asp Ser Asp Ile Ser Gly Thr Leu Lys Phe
 125 130 135
 Ala Cys Glu Ser Ile Val Glu Glu Tyr Glu Asp Glu Leu Ile Glu

	140		145		150
Phe Phe Ser Arg Glu Ala Asp Asn Val Lys Asp Lys Leu Cys Ser					
	155		160		165
Lys Arg Thr Asp Leu Cys Asp His Ala Leu His Ile Ser His Asp					
	170		175		180
Glu Leu					

<210> 175
 <211> 2027
 <212> DNA
 <213> Homo Sapien

<400> 175
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 ctagcatggg ccaactgcag ggtgggagat tcctgatggg aacaaattct 150
 ccagacagca gagatggtga agggcctgtg cgggaggcga cagtgaacc 200
 ctttgccatc gacatatttc ctgtcaccaa caaagatttc agggattttg 250
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 gtctttgagg actttgtctc tgatgagctg agaaacaaag ccaccagcc 350
 aatgaagtct gtactctggt ggcttcaggt ggaaaaggca ttttgagggc 400
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 ttacacgtga gctggaatga cggcgtgcc tactgtgctt ggcggggaaa 500
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 gccttctagg gtcactgtca ttccctggcc atgttgcaaa cagcgcaatt 1000
 ccaagctcga gagcttcagc ctcaggaaaag aacttcccct tcctgtctc 1050

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aacatgtccc tggagagtag cctgctccca cactgtcact ggatgtcatg 1950
gggccaataa aatctcctgc aattgtgtat ctcaaaaaaa aaaaaaaaaa 2000
aaaaaaaaaa aaaaaaaaaa aaaaaaa 2027
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<210> 176
<211> 301
<212> PRT
<213> Homo Sapien
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<400> 176
Met Ala Arg His Gly Leu Pro Leu Leu Pro Leu Leu Ser Leu Leu
  1             5             10            15

Val Gly Ala Trp Leu Lys Leu Gly Asn Gly Gln Ala Thr Ser Met
          20            25            30

Val Gln Leu Gln Gly Gly Arg Phe Leu Met Gly Thr Asn Ser Pro
          35            40            45

Asp Ser Arg Asp Gly Glu Gly Pro Val Arg Glu Ala Thr Val Lys
          50            55            60
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gcgagcgctt tatttctgga gctgagggct aaaacttttt tgacttttct 100
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 acctttccgt ggtggctcag ctccttaact ttggggcgct ttgctatggg 200
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 agcaggagga agagagattt ggatggctca gaggactggg tgtactacag 400
 aatttctcac gaggagaagg acctgttttt taacttgacg gtcaatcaag 450
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 catgttaaga tgatggcttc ctctgcccc ctctgccatc tcagtggcac 550
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<210> 178
 <211> 229
 <212> PRT
 <213> Homo Sapien

<400> 178
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 Ala Gln Leu Leu Asn Phe Gly Ala Leu Cys Tyr Gly Arg Gln Pro
 20 25 30
 Gln Pro Gly Pro Val Arg Phe Pro Asp Arg Arg Gln Glu His Phe
 35 40 45
 Ile Lys Gly Leu Pro Glu Tyr His Val Val Gly Pro Val Arg Val
 50 55 60
 Asp Ala Ser Gly His Phe Leu Ser Tyr Gly Leu His Tyr Pro Ile
 65 70 75

Thr	Ser	Ser	Arg	Arg	Lys	Arg	Asp	Leu	Asp	Gly	Ser	Glu	Asp	Trp	
				80					85					90	
Val	Tyr	Tyr	Arg	Ile	Ser	His	Glu	Glu	Lys	Asp	Leu	Phe	Phe	Asn	
				95					100					105	
Leu	Thr	Val	Asn	Gln	Gly	Phe	Leu	Ser	Asn	Ser	Tyr	Ile	Met	Glu	
			110						115					120	
Lys	Arg	Tyr	Gly	Asn	Leu	Ser	His	Val	Lys	Met	Met	Ala	Ser	Ser	
			125						130					135	
Ala	Pro	Leu	Cys	His	Leu	Ser	Gly	Thr	Val	Leu	Gln	Gln	Gly	Thr	
			140						145					150	
Arg	Val	Gly	Thr	Ala	Ala	Leu	Ser	Ala	Cys	His	Gly	Leu	Thr	Gly	
			155						160					165	
Phe	Phe	Gln	Leu	Pro	His	Gly	Asp	Phe	Phe	Ile	Glu	Pro	Val	Lys	
			170						175					180	
Lys	His	Pro	Leu	Val	Glu	Gly	Gly	Tyr	His	Pro	His	Ile	Val	Tyr	
			185						190					195	
Arg	Arg	Gln	Lys	Val	Pro	Glu	Thr	Lys	Glu	Pro	Thr	Cys	Gly	Leu	
			200						205					210	
Lys	Gly	Ile	Val	Thr	His	Met	Ser	Ser	Trp	Val	Glu	Glu	Ser	Val	
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Leu	Phe	Phe	Trp												

<210> 179
 <211> 2134
 <212> DNA
 <213> Homo Sapien

<220>
 <221> unsure
 <222> 2108
 <223> unknown base

<400> 179
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 tgttacctgt tatcttttat tattactcca caaagaaata cttggatggt 200
 cgtctgtttg tcagctctgc actgggagac aaattaactg ccgtaactta 250
 ggcctttcga gtattcctaa gaattttcct gaaagtacag tttttctgta 300
 tctgactggg aataatatat cttatataaa tgaaagtgaa ttaacaggac 350

ttcattctct tgtagcattg tatttggata attctaacat tctgtatgta 400
 tatccaaaag cctttgttca attgaggcat ctatatatttc tatttctaaa 450
 taataatttc atcaaacgct tagatcctgg aatattttaag ggacttttaa 500
 atcttcgtaa tttatattta cagtataatc aggtatcttt tgttccgaga 550
 ggagtattta atgatctagt ttcagttcag tacttaaatc taaaaaggaa 600
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 aaaaaagta ccatcaaatg cctttgaagt acttaaaagt cttagaagac 800
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 aagaatttaa tttaccttaa gttagataga aacagaataa ttagcattga 1050
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 tgttgtaaaa tctcctcata ttcatacaca gactactgcg ctaatgatgg 1400
 cctggcataa agtaaccaca aatggcagtc ctctggaaaa tactgagact 1450
 gagaacatta ctttctggga acgaattcct acttcacctg ctggtagatt 1500
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 tcagtgccat ggacatgatt taaactgaaa cctccttata taattatata 2050
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 gttttttntt aaaaaaaaaa aaaaaaaaaa aaaa 2134

<210> 180

<211> 622

<212> PRT

<213> Homo Sapien

<400> 180

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Val	Val	Thr	Cys	Tyr	Leu	Leu	Leu	Leu	Leu	His	Lys	Glu	Ile	Leu
				20					25					30
Gly	Cys	Ser	Ser	Val	Cys	Gln	Leu	Cys	Thr	Gly	Arg	Gln	Ile	Asn
				35					40					45
Cys	Arg	Asn	Leu	Gly	Leu	Ser	Ser	Ile	Pro	Lys	Asn	Phe	Pro	Glu
				50					55					60
Ser	Thr	Val	Phe	Leu	Tyr	Leu	Thr	Gly	Asn	Asn	Ile	Ser	Tyr	Ile
				65					70					75
Asn	Glu	Ser	Glu	Leu	Thr	Gly	Leu	His	Ser	Leu	Val	Ala	Leu	Tyr
				80					85					90
Leu	Asp	Asn	Ser	Asn	Ile	Leu	Tyr	Val	Tyr	Pro	Lys	Ala	Phe	Val
				95					100					105
Gln	Leu	Arg	His	Leu	Tyr	Phe	Leu	Phe	Leu	Asn	Asn	Asn	Phe	Ile
				110					115					120
Lys	Arg	Leu	Asp	Pro	Gly	Ile	Phe	Lys	Gly	Leu	Leu	Asn	Leu	Arg
				125					130					135
Asn	Leu	Tyr	Leu	Gln	Tyr	Asn	Gln	Val	Ser	Phe	Val	Pro	Arg	Gly
				140					145					150
Val	Phe	Asn	Asp	Leu	Val	Ser	Val	Gln	Tyr	Leu	Asn	Leu	Gln	Arg
				155					160					165
Asn	Arg	Leu	Thr	Val	Leu	Gly	Ser	Gly	Thr	Phe	Val	Gly	Met	Val
				170					175					180
Ala	Leu	Arg	Ile	Leu	Asp	Leu	Ser	Asn	Asn	Asn	Ile	Leu	Arg	Ile
				185					190					195

Ser	Glu	Ser	Gly	Phe	Gln	His	Leu	Glu	Asn	Leu	Ala	Cys	Leu	Tyr	200	205	210
Leu	Gly	Ser	Asn	Asn	Leu	Thr	Lys	Val	Pro	Ser	Asn	Ala	Phe	Glu	215	220	225
Val	Leu	Lys	Ser	Leu	Arg	Arg	Leu	Ser	Leu	Ser	His	Asn	Pro	Ile	230	235	240
Glu	Ala	Ile	Gln	Pro	Phe	Ala	Phe	Lys	Gly	Leu	Ala	Asn	Leu	Glu	245	250	255
Tyr	Leu	Leu	Leu	Lys	Asn	Ser	Arg	Ile	Arg	Asn	Val	Thr	Arg	Asp	260	265	270
Gly	Phe	Ser	Gly	Ile	Asn	Asn	Leu	Lys	His	Leu	Ile	Leu	Ser	His	275	280	285
Asn	Asp	Leu	Glu	Asn	Leu	Asn	Ser	Asp	Thr	Phe	Ser	Leu	Leu	Lys	290	295	300
Asn	Leu	Ile	Tyr	Leu	Lys	Leu	Asp	Arg	Asn	Arg	Ile	Ile	Ser	Ile	305	310	315
Asp	Asn	Asp	Thr	Phe	Glu	Asn	Met	Gly	Ala	Ser	Leu	Lys	Ile	Leu	320	325	330
Asn	Leu	Ser	Phe	Asn	Asn	Leu	Thr	Ala	Leu	His	Pro	Arg	Val	Leu	335	340	345
Lys	Pro	Leu	Ser	Ser	Leu	Ile	His	Leu	Gln	Ala	Asn	Ser	Asn	Pro	350	355	360
Trp	Glu	Cys	Asn	Cys	Lys	Leu	Leu	Gly	Leu	Arg	Asp	Trp	Leu	Ala	365	370	375
Ser	Ser	Ala	Ile	Thr	Leu	Asn	Ile	Tyr	Cys	Gln	Asn	Pro	Pro	Ser	380	385	390
Met	Arg	Gly	Arg	Ala	Leu	Arg	Tyr	Ile	Asn	Ile	Thr	Asn	Cys	Val	395	400	405
Thr	Ser	Ser	Ile	Asn	Val	Ser	Arg	Ala	Trp	Ala	Val	Val	Lys	Ser	410	415	420
Pro	His	Ile	His	His	Lys	Thr	Thr	Ala	Leu	Met	Met	Ala	Trp	His	425	430	435
Lys	Val	Thr	Thr	Asn	Gly	Ser	Pro	Leu	Glu	Asn	Thr	Glu	Thr	Glu	440	445	450
Asn	Ile	Thr	Phe	Trp	Glu	Arg	Ile	Pro	Thr	Ser	Pro	Ala	Gly	Arg	455	460	465
Phe	Phe	Gln	Glu	Asn	Ala	Phe	Gly	Asn	Pro	Leu	Glu	Thr	Thr	Ala	470	475	480
Val	Leu	Pro	Val	Gln	Ile	Gln	Leu	Thr	Thr	Ser	Val	Thr	Leu	Asn			

485	490	495
Leu Glu Lys Asn Ser Ala Leu Pro Asn Asp Ala Ala Ser Met Ser		
500	505	510
Gly Lys Thr Ser Leu Ile Cys Thr Gln Glu Val Glu Lys Leu Asn		
515	520	525
Glu Ala Phe Asp Ile Leu Leu Ala Phe Phe Ile Leu Ala Cys Val		
530	535	540
Leu Ile Ile Phe Leu Ile Tyr Lys Val Val Gln Phe Lys Gln Lys		
545	550	555
Leu Lys Ala Ser Glu Asn Ser Arg Glu Asn Arg Leu Glu Tyr Tyr		
560	565	570
Ser Phe Tyr Gln Ser Ala Arg Tyr Asn Val Thr Ala Ser Ile Cys		
575	580	585
Asn Thr Ser Pro Asn Ser Leu Glu Ser Pro Gly Leu Glu Gln Ile		
590	595	600
Arg Leu His Lys Gln Ile Val Pro Glu Asn Glu Ala Gln Val Ile		
605	610	615
Leu Phe Glu His Ser Ala Leu		
620		

<210> 181
 <211> 1624
 <212> DNA
 <213> Homo Sapien

<220>
 <221> unsure
 <222> 1560-1561
 <223> unknown base

<400> 181
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 atcaagctcc gagtcacccg tgtggggcat tcgtcccccc tggcacagtt 150
 ggctcttttc cagaagcccc ttttgtttgt tttacgtcta aattcgcgtc 200
 ggttcttatt tctctccctg gcaaggtctg aagacgggta ggagaataac 250
 ctgtgtcagc gtgttatgat gccgtcccgt accaacctgg ctactggaat 300
 cccagtagt aaagtgaat attcaaggct ctccagcaca gacgatggct 350
 acattgacct tcagtttaag aaaaccctc ctaagatccc ttataaggcc 400
 atcgcaactg ccaactgtgt gtttttgatt ggcgcccttc tcattattat 450

aggtccctc ctgctgtcag gctacatcag caaagggggg gcagaccggg 500
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 cacctgcgca tcgcttacta tgcattccaa ggctaccgtg gttactccta 600
 tgatgacatt ccagactttg atgactagca cccaccccat agctgaggag 650
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 acttatattc caaagaaatt aaaatgttga aatccaaatc ctagaaataa 1550
 aatgagtttn nttccaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 1600
 aaaaaaaaaa aaaaaaaaaa aaaa 1624

<210> 182
 <211> 120
 <212> PRT
 <213> Homo Sapien

<400> 182
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 Lys Val Lys Tyr Ser Arg Leu Ser Ser Thr Asp Asp Gly Tyr Ile

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Asp Leu Gln Phe	Lys Lys Thr Pro Pro	Lys Ile Pro Tyr Lys Ala			
	35	40		45	
Ile Ala Leu Ala	Thr Val Leu Phe Leu	Ile Gly Ala Phe Leu Ile			
	50	55		60	
Ile Ile Gly Ser	Leu Leu Leu Ser Gly	Tyr Ile Ser Lys Gly Gly			
	65	70		75	
Ala Asp Arg Ala	Val Pro Val Leu Ile	Ile Gly Ile Leu Val Phe			
	80	85		90	
Leu Pro Gly Phe	Tyr His Leu Arg Ile	Ala Tyr Tyr Ala Ser Lys			
	95	100		105	
Gly Tyr Arg Gly	Tyr Ser Tyr Asp Asp	Ile Pro Asp Phe Asp Asp			
	110	115		120	

<210> 183

<211> 2823

<212> DNA

<213> Homo Sapien

<400> 183

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tgtatttact gcccttctca aaa 2823

<210> 184
<211> 331
<212> PRT
<213> Homo Sapien

<400> 184
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Ile Asp Arg Asn Phe Asp Ser Glu Ile Cys Gly Val Val Ser Asp
35 40 45
Ala Val Trp Asp Ala Arg Glu Gln Gln Gln Gln Ile Leu Gln Met
50 55 60
Ala Ile Val Glu His Leu Tyr Gln Gln Gly Met Leu Ser Val Ala
65 70 75
Glu Glu Leu Cys Gln Glu Ser Thr Leu Asn Val Asp Leu Asp Phe
80 85 90
Lys Gln Pro Phe Leu Glu Leu Asn Arg Ile Leu Glu Ala Leu His
95 100 105
Glu Gln Asp Leu Gly Pro Ala Leu Glu Trp Ala Val Ser His Arg
110 115 120
Gln Arg Leu Leu Glu Leu Asn Ser Ser Leu Glu Phe Lys Leu His
125 130 135
Arg Leu His Phe Ile Arg Leu Leu Ala Gly Gly Pro Ala Lys Gln

140	145	150
Leu Glu Ala Leu Ser Tyr Ala Arg His	Phe Gln Pro Phe Ala Arg	
155	160	165
Leu His Gln Arg Glu Ile Gln Val Met	Met Gly Ser Leu Val Tyr	
170	175	180
Leu Arg Leu Gly Leu Glu Lys Ser Pro	Tyr Cys His Leu Leu Asp	
185	190	195
Ser Ser His Trp Ala Glu Ile Cys Glu	Thr Phe Thr Arg Asp Ala	
200	205	210
Cys Ser Leu Leu Gly Leu Ser Val Glu	Ser Pro Leu Ser Val Ser	
215	220	225
Phe Ala Ser Gly Cys Val Ala Leu Pro	Val Leu Met Asn Ile Lys	
230	235	240
Ala Val Ile Glu Gln Arg Gln Cys Thr	Gly Val Trp Asn His Lys	
245	250	255
Asp Glu Leu Pro Ile Glu Ile Glu Leu	Gly Met Lys Cys Trp Tyr	
260	265	270
His Ser Val Phe Ala Cys Pro Ile Leu	Arg Gln Gln Thr Ser Asp	
275	280	285
Ser Asn Pro Pro Ile Lys Leu Ile Cys	Gly His Val Ile Ser Arg	
290	295	300
Asp Ala Leu Asn Lys Leu Ile Asn Gly	Gly Lys Leu Lys Cys Pro	
305	310	315
Tyr Cys Pro Met Glu Gln Asn Pro Ala	Asp Gly Lys Arg Ile Ile	
320	325	330

Phe

<210> 185

<211> 1162

<212> DNA

<213> Homo Sapien

<400> 185

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accccgacaga gcgcacccat caaagctttg cgcaacgccca acctcaggcg 150

agatgacttg taccgaagag atgagaccat ccaggtgaaa ggaaacggct 200

acgtgcagag tcctagattc ccgaacagct accccaggaa cctgctcctg 250

acatggcggc ttcactctca ggagaataca cggatacagc tagtgtttga 300

caatcagttt ggattagagg aagcagaaaa tgatatctgt aggtatgatt 350
 ttgtggaagt tgaagatata tccgaaacca gtaccattat tagaggacga 400
 tgggtgtggac acaaggaagt tcctccaagg ataaaatcaa gaacgaacca 450
 aattaaatc acattcaagt ccgatgacta ctttgtggct aaacctggat 500
 tcaagattta ttattctttg ctggaagatt tccaacccgc agcagcttca 550
 gagaccaact gggaatctgt cacaagctct atttcagggg taccctataa 600
 ctctccatca gtaacggatc ccactctgat tgcggatgct ctggacaaaa 650
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 aatataagag aagagctgaa gttggccaat gtggtcttct ttccacgttg 900
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 gtattacagt ttgagcctgg ccacatcaag aggaggggta gagctaagac 1050
 catggctcta gttgacatcc agttggatca ccatgaacga tgcgattgta 1100
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 agcctgagag aa 1162

<210> 186

<211> 364

<212> PRT

<213> Homo Sapien

<400> 186

Met	His	Arg	Leu	Ile	Phe	Val	Tyr	Thr	Leu	Ile	Cys	Ala	Asn	Phe
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Cys	Ser	Cys	Arg	Asp	Thr	Ser	Ala	Thr	Pro	Gln	Ser	Ala	Ser	Ile
				20					25					30

Lys	Ala	Leu	Arg	Asn	Ala	Asn	Leu	Arg	Arg	Asp	Asp	Leu	Tyr	Arg
				35					40					45

Arg	Asp	Glu	Thr	Ile	Gln	Val	Lys	Gly	Asn	Gly	Tyr	Val	Gln	Ser
				50					55					60

Pro	Arg	Phe	Pro	Asn	Ser	Tyr	Pro	Arg	Asn	Leu	Leu	Leu	Thr	Trp
				65					70					75

Arg	Leu	His	Ser	Gln	Glu	Asn	Thr	Arg	Ile	Gln	Leu	Val	Phe	Asp
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

80										85					90				
Asn	Gln	Phe	Gly	Leu	Glu	Glu	Ala	Glu	Asn	Asp	Ile	Cys	Arg	Tyr					
				95					100					105					
Asp	Phe	Val	Glu	Val	Glu	Asp	Ile	Ser	Glu	Thr	Ser	Thr	Ile	Ile					
				110					115					120					
Arg	Gly	Arg	Trp	Cys	Gly	His	Lys	Glu	Val	Pro	Pro	Arg	Ile	Lys					
				125					130					135					
Ser	Arg	Thr	Asn	Gln	Ile	Lys	Ile	Thr	Phe	Lys	Ser	Asp	Asp	Tyr					
				140					145					150					
Phe	Val	Ala	Lys	Pro	Gly	Phe	Lys	Ile	Tyr	Tyr	Ser	Leu	Leu	Glu					
				155					160					165					
Asp	Phe	Gln	Pro	Ala	Ala	Ala	Ser	Glu	Thr	Asn	Trp	Glu	Ser	Val					
				170					175					180					
Thr	Ser	Ser	Ile	Ser	Gly	Val	Ser	Tyr	Asn	Ser	Pro	Ser	Val	Thr					
				185					190					195					
Asp	Pro	Thr	Leu	Ile	Ala	Asp	Ala	Leu	Asp	Lys	Lys	Ile	Ala	Glu					
				200					205					210					
Phe	Asp	Thr	Val	Glu	Asp	Leu	Leu	Lys	Tyr	Phe	Asn	Pro	Glu	Ser					
				215					220					225					
Trp	Gln	Glu	Asp	Leu	Glu	Asn	Met	Tyr	Leu	Asp	Thr	Pro	Arg	Tyr					
				230					235					240					
Arg	Gly	Arg	Ser	Tyr	His	Asp	Arg	Lys	Ser	Lys	Val	Asp	Leu	Asp					
				245					250					255					
Arg	Leu	Asn	Asp	Asp	Ala	Lys	Arg	Tyr	Ser	Cys	Thr	Pro	Arg	Asn					
				260					265					270					
Tyr	Ser	Val	Asn	Ile	Arg	Glu	Glu	Leu	Lys	Leu	Ala	Asn	Val	Val					
				275					280					285					
Phe	Phe	Pro	Arg	Cys	Leu	Leu	Val	Gln	Arg	Cys	Gly	Gly	Asn	Cys					
				290					295					300					
Gly	Cys	Gly	Thr	Val	Asn	Trp	Arg	Ser	Cys	Thr	Cys	Asn	Ser	Gly					
				305					310					315					
Lys	Thr	Val	Lys	Lys	Tyr	His	Glu	Val	Leu	Gln	Phe	Glu	Pro	Gly					
				320					325					330					
His	Ile	Lys	Arg	Arg	Gly	Arg	Ala	Lys	Thr	Met	Ala	Leu	Val	Asp					
				335					340					345					
Ile	Gln	Leu	Asp	His	His	Glu	Arg	Cys	Asp	Cys	Ile	Cys	Ser	Ser					
				350					355					360					
Arg	Pro	Pro	Arg																

<210> 187
 <211> 1750
 <212> DNA
 <213> Homo Sapien

<400> 187
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 ttcttatcca tcaacatgaa gaatgtccta caatggactc caccagaggg 150
 tcttcaagga gttaaagtta ctacactgt gcagtatttc atatatgggc 200
 aaaagaaatg gctgaataaa tcagaatgca gaaatatcaa tagaacctac 250
 tgtgatcttt ctgctgaaac ttctgactac gaacaccagt attatgcaa 300
 agttaaggcc atttggggaa caaagtgttc caaatgggct gaaagtggac 350
 ggttctatcc ttttttagaa acacaaattg gccaccaga ggtggcactg 400
 actacagatg agaagtcctt ttctgttgc ctgacagctc cagagaagtg 450
 gaagagaaat ccagaagacc ttctgtttc catgcaacaa atatactcca 500
 atctgaagta taacgtgtct gtgttgaata ctaaatacaa cagaactggg 550
 tcccagtgtg tgaccaacca cacgctggtg ctacactggc tggagccgaa 600
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 gtgctcagcc ttctgagaag cagtgtgcca ggactttgaa agatcaatca 700
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 gtatgcttcg catttgatgg aaattttttg tgactctgaa gaaaacacgg 1100
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 gataaaacag tcattgaata tgaatatgat gtcagaacca ctgacatttg 1200
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 aaggaacatt attggagtcg caggcagcgt tggcagtcct gggcccgcaa 1300

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<210> 188

<211> 542

<212> PRT

<213> Homo Sapien

<400> 188

Met	Pro	Leu	Pro	Pro	Leu	Leu	Leu	Leu	Leu	Leu	Ala	Ala	Pro	Trp
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Gly	Arg	Ala	Val	Pro	Cys	Val	Ser	Gly	Gly	Leu	Pro	Lys	Pro	Ala
				20					25					30
Asn	Ile	Thr	Phe	Leu	Ser	Ile	Asn	Met	Lys	Asn	Val	Leu	Gln	Trp
				35					40					45
Thr	Pro	Pro	Glu	Gly	Leu	Gln	Gly	Val	Lys	Val	Thr	Tyr	Thr	Val
				50					55					60
Gln	Tyr	Phe	Ile	Tyr	Gly	Gln	Lys	Lys	Trp	Leu	Asn	Lys	Ser	Glu
				65					70					75
Cys	Arg	Asn	Ile	Asn	Arg	Thr	Tyr	Cys	Asp	Leu	Ser	Ala	Glu	Thr
				80					85					90
Ser	Asp	Tyr	Glu	His	Gln	Tyr	Tyr	Ala	Lys	Val	Lys	Ala	Ile	Trp
				95					100					105
Gly	Thr	Lys	Cys	Ser	Lys	Trp	Ala	Glu	Ser	Gly	Arg	Phe	Tyr	Pro
				110					115					120
Phe	Leu	Glu	Thr	Gln	Ile	Gly	Pro	Pro	Glu	Val	Ala	Leu	Thr	Thr
				125					130					135
Asp	Glu	Lys	Ser	Ile	Ser	Val	Val	Leu	Thr	Ala	Pro	Glu	Lys	Trp
				140					145					150
Lys	Arg	Asn	Pro	Glu	Asp	Leu	Pro	Val	Ser	Met	Gln	Gln	Ile	Tyr
				155					160					165
Ser	Asn	Leu	Lys	Tyr	Asn	Val	Ser	Val	Leu	Asn	Thr	Lys	Ser	Asn

Arg	Thr	Trp	Ser	Gln	Cys	Val	Thr	Asn	His	Thr	Leu	Val	Leu	Thr
				185					190					195
Trp	Leu	Glu	Pro	Asn	Thr	Leu	Tyr	Cys	Val	His	Val	Glu	Ser	Phe
				200					205					210
Val	Pro	Gly	Pro	Pro	Arg	Arg	Ala	Gln	Pro	Ser	Glu	Lys	Gln	Cys
				215					220					225
Ala	Arg	Thr	Leu	Lys	Asp	Gln	Ser	Ser	Glu	Phe	Lys	Ala	Lys	Ile
				230					235					240
Ile	Phe	Trp	Tyr	Val	Leu	Pro	Ile	Ser	Ile	Thr	Val	Phe	Leu	Phe
				245					250					255
Ser	Val	Met	Gly	Tyr	Ser	Ile	Tyr	Arg	Tyr	Ile	His	Val	Gly	Lys
				260					265					270
Glu	Lys	His	Pro	Ala	Asn	Leu	Ile	Leu	Ile	Tyr	Gly	Asn	Glu	Phe
				275					280					285
Asp	Lys	Arg	Phe	Phe	Val	Pro	Ala	Glu	Lys	Ile	Val	Ile	Asn	Phe
				290					295					300
Ile	Thr	Leu	Asn	Ile	Ser	Asp	Asp	Ser	Lys	Ile	Ser	His	Gln	Asp
				305					310					315
Met	Ser	Leu	Leu	Gly	Lys	Ser	Ser	Asp	Val	Ser	Ser	Leu	Asn	Asp
				320					325					330
Pro	Gln	Pro	Ser	Gly	Asn	Leu	Arg	Pro	Pro	Gln	Glu	Glu	Glu	Glu
				335					340					345
Val	Lys	His	Leu	Gly	Tyr	Ala	Ser	His	Leu	Met	Glu	Ile	Phe	Cys
				350					355					360
Asp	Ser	Glu	Glu	Asn	Thr	Glu	Gly	Thr	Ser	Leu	Thr	Gln	Gln	Glu
				365					370					375
Ser	Leu	Ser	Arg	Thr	Ile	Pro	Pro	Asp	Lys	Thr	Val	Ile	Glu	Tyr
				380					385					390
Glu	Tyr	Asp	Val	Arg	Thr	Thr	Asp	Ile	Cys	Ala	Gly	Pro	Glu	Glu
				395					400					405
Gln	Glu	Leu	Ser	Leu	Gln	Glu	Glu	Val	Ser	Thr	Gln	Gly	Thr	Leu
				410					415					420
Leu	Glu	Ser	Gln	Ala	Ala	Leu	Ala	Val	Leu	Gly	Pro	Gln	Thr	Leu
				425					430					435
Gln	Tyr	Ser	Tyr	Thr	Pro	Gln	Leu	Gln	Asp	Leu	Asp	Pro	Leu	Ala
				440					445					450
Gln	Glu	His	Thr	Asp	Ser	Glu	Glu	Gly	Pro	Glu	Glu	Glu	Pro	Ser
				455					460					465

Thr	Thr	Leu	Val	Asp	Trp	Asp	Pro	Gln	Thr	Gly	Arg	Leu	Cys	Ile
				470					475					480
Pro	Ser	Leu	Ser	Ser	Phe	Asp	Gln	Asp	Ser	Glu	Gly	Cys	Glu	Pro
				485					490					495
Ser	Glu	Gly	Asp	Gly	Leu	Gly	Glu	Glu	Gly	Leu	Leu	Ser	Arg	Leu
				500					505					510
Tyr	Glu	Glu	Pro	Ala	Pro	Asp	Arg	Pro	Pro	Gly	Glu	Asn	Glu	Thr
				515					520					525
Tyr	Leu	Met	Gln	Phe	Met	Glu	Glu	Trp	Gly	Leu	Tyr	Val	Gln	Met
				530					535					540

Glu Asn

<210> 189
 <211> 2150
 <212> DNA
 <213> Homo Sapien

<400> 189
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 agggcaagta ctggctgggc tggagccagc ggggcagcca gatcgccttc 150
 cgcctccagg tgcgcactgc aggetacgtg ggcttcggct tctcgccac 200
 cggggccatg gcgtccgccc acatcgctcg gggcgggggtg gccacgggc 250
 ggcctacct ccaggattat ttacaaatg caaatagaga gttgaaaaaa 300
 gatgctcagc aagattacca tctagaatat gccatggaaa atagcacaca 350
 cacaataatt gaatttacca gagagctgca tacatgtgac ataaatgaca 400
 agagtataac ggatagcact gtgagagtga tctgggccta ccaccatgaa 450
 gatgcaggag aagctggtcc caagtacat gactccaata ggggcaccaa 500
 gagtttgagg ttattgaatc ctgagaaaac tagtgtgcta tctacagcct 550
 taccatactt tgatctggta aatcaggacg tccccatccc aaacaaagat 600
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<210> 190

<211> 613

<212> PRT

<213> Homo Sapien

<400> 190

Met Cys Cys Trp Pro Leu Leu Leu Leu Trp Gly Leu Leu Pro Gly
 1 5 10 15
 Thr Ala Ala Gly Gly Ser Gly Arg Thr Tyr Pro His Arg Thr Leu
 20 25 30
 Leu Asp Ser Glu Gly Lys Tyr Trp Leu Gly Trp Ser Gln Arg Gly
 35 40 45
 Ser Gln Ile Ala Phe Arg Leu Gln Val Arg Thr Ala Gly Tyr Val
 50 55 60
 Gly Phe Gly Phe Ser Pro Thr Gly Ala Met Ala Ser Ala Asp Ile
 65 70 75
 Val Val Gly Gly Val Ala His Gly Arg Pro Tyr Leu Gln Asp Tyr
 80 85 90
 Phe Thr Asn Ala Asn Arg Glu Leu Lys Lys Asp Ala Gln Gln Asp
 95 100 105
 Tyr His Leu Glu Tyr Ala Met Glu Asn Ser Thr His Thr Ile Ile
 110 115 120
 Glu Phe Thr Arg Glu Leu His Thr Cys Asp Ile Asn Asp Lys Ser
 125 130 135
 Ile Thr Asp Ser Thr Val Arg Val Ile Trp Ala Tyr His His Glu
 140 145 150
 Asp Ala Gly Glu Ala Gly Pro Lys Tyr His Asp Ser Asn Arg Gly
 155 160 165
 Thr Lys Ser Leu Arg Leu Leu Asn Pro Glu Lys Thr Ser Val Leu
 170 175 180
 Ser Thr Ala Leu Pro Tyr Phe Asp Leu Val Asn Gln Asp Val Pro
 185 190 195
 Ile Pro Asn Lys Asp Thr Thr Tyr Trp Cys Gln Met Phe Lys Ile
 200 205 210
 Pro Val Phe Gln Glu Lys His His Val Ile Lys Val Glu Pro Val
 215 220 225
 Ile Gln Arg Gly His Glu Ser Leu Val His His Ile Leu Leu Tyr
 230 235 240
 Gln Cys Ser Asn Asn Phe Asn Asp Ser Val Leu Glu Ser Gly His
 245 250 255
 Glu Cys Tyr His Pro Asn Met Pro Asp Ala Phe Leu Thr Cys Glu
 260 265 270
 Thr Val Ile Phe Ala Trp Ala Ile Gly Gly Glu Gly Phe Ser Tyr
 275 280 285
 Pro Pro His Val Gly Leu Ser Leu Gly Thr Pro Leu Asp Pro His

	290	295	300
Tyr Val Leu Leu	Glu Val His Tyr Asp	Asn Pro Thr Tyr Glu	Glu
	305	310	315
Gly Leu Ile Asp	Asn Ser Gly Leu Arg	Leu Phe Tyr Thr Met	Asp
	320	325	330
Ile Arg Lys Tyr	Asp Ala Gly Val Ile	Glu Ala Gly Leu Trp	Val
	335	340	345
Ser Leu Phe His	Thr Ile Pro Pro Gly	Met Pro Glu Phe Gln	Ser
	350	355	360
Glu Gly His Cys	Thr Leu Glu Cys Leu	Glu Glu Ala Leu Glu	Ala
	365	370	375
Glu Lys Pro Ser	Gly Ile His Val Phe	Ala Val Leu Leu His	Ala
	380	385	390
His Leu Ala Gly	Arg Gly Ile Arg Leu	Arg His Phe Arg Lys	Gly
	395	400	405
Lys Glu Met Lys	Leu Leu Ala Tyr Asp	Asp Asp Phe Asp Phe	Asn
	410	415	420
Phe Gln Glu Phe	Gln Tyr Leu Lys Glu	Glu Gln Thr Ile Leu	Pro
	425	430	435
Gly Asp Asn Leu	Ile Thr Glu Cys Arg	Tyr Asn Thr Lys Asp	Arg
	440	445	450
Ala Glu Met Thr	Trp Gly Gly Leu Ser	Thr Arg Ser Glu Met	Cys
	455	460	465
Leu Ser Tyr Leu	Leu Tyr Tyr Pro Arg	Ile Asn Leu Thr Arg	Cys
	470	475	480
Ala Ser Ile Pro	Asp Ile Met Glu Gln	Leu Gln Phe Ile Gly	Val
	485	490	495
Lys Glu Ile Tyr	Arg Pro Val Thr Thr	Trp Pro Phe Ile Ile	Lys
	500	505	510
Ser Pro Lys Gln	Tyr Lys Asn Leu Ser	Phe Met Asp Ala Met	Asn
	515	520	525
Lys Phe Lys Trp	Thr Lys Lys Glu Gly	Leu Ser Phe Asn Lys	Leu
	530	535	540
Val Leu Ser Leu	Pro Val Asn Val Arg	Cys Ser Lys Thr Asp	Asn
	545	550	555
Ala Glu Trp Ser	Ile Gln Gly Met Thr	Ala Leu Pro Pro Asp	Ile
	560	565	570
Glu Arg Pro Tyr	Lys Ala Glu Pro Leu	Val Cys Gly Thr Ser	Ser
	575	580	585

Ser Ser Ser Leu His Arg Asp Phe Ser Ile Asn Leu Leu Val Cys
590 595 600

Leu Leu Leu Leu Ser Cys Thr Leu Ser Thr Lys Ser Leu
605 610

<210> 191

<211> 1647

<212> DNA

<213> Homo Sapien

<400> 191

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ttgaaataga agggaatcat cttgttcaaa gcaagaatag gagtctcata 200
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<210> 192
 <211> 513
 <212> PRT
 <213> Homo Sapien

<400> 192
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 Ser Ala Phe Pro Leu Val Arg Met Thr Glu Asn Glu Glu Asn Met
 20 25 30
 Gln Leu Ala Gln Ala Tyr Leu Asn Gln Phe Tyr Ser Leu Glu Ile
 35 40 45
 Glu Gly Asn His Leu Val Gln Ser Lys Asn Arg Ser Leu Ile Asp
 50 55 60
 Asp Lys Ile Arg Glu Met Gln Ala Phe Phe Gly Leu Thr Val Thr
 65 70 75
 Gly Lys Leu Asp Ser Asn Thr Leu Glu Ile Met Lys Thr Pro Arg
 80 85 90
 Cys Gly Val Pro Asp Val Gly Gln Tyr Gly Tyr Thr Leu Pro Gly
 95 100 105
 Trp Arg Lys Tyr Asn Leu Thr Tyr Arg Ile Ile Asn Tyr Thr Pro
 110 115 120
 Asp Met Ala Arg Ala Ala Val Asp Glu Ala Ile Gln Glu Gly Leu
 125 130 135
 Glu Val Trp Ser Lys Val Thr Pro Leu Lys Phe Thr Lys Ile Ser
 140 145 150
 Lys Gly Ile Ala Asp Ile Met Ile Ala Phe Arg Thr Arg Val His
 155 160 165

	455		460		465
Lys Glu Pro Lys Asn Ser Ser Phe Gly Phe Asp Ile Asn Lys Glu					
	470		475		480
Lys Ala His Ser Gly Gly Ile Lys Ile Leu Tyr His Lys Ser Leu					
	485		490		495
Ser Leu Phe Ile Phe Gly Ile Val His Leu Leu Lys Asn Thr Ser					
	500		505		510
Ile Tyr Gln					

<210> 193
 <211> 702
 <212> DNA
 <213> Homo Sapien

<400> 193
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 ggtgcacttc ctgcctctgc tgggtgcactt tctgccccta ctggtatatt 200
 tgctgcctct gctggggcgc ttcctgcctc ggctggtgta tctcctgccc 250
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 tggctctgct ggcgcacttt cctgcccctg ctggtgtatt tcctgcccct 400
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 ca 702

<210> 194
 <211> 125
 <212> PRT
 <213> Homo Sapien

<400> 194
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<210> 196
<211> 552
<212> PRT
<213> Homo Sapien

<400> 196
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Leu Glu Val Pro Thr Gly Pro Glu Val Gln Thr Pro Lys Pro Ser
35 40 45
Asp Ala Asp Trp Asp Asp Leu Trp Asp Gln Phe Asp Glu Arg Arg
50 55 60
Tyr Leu Asn Ala Lys Lys Trp Arg Val Gly Asp Asp Pro Tyr Lys
65 70 75
Leu Tyr Ala Phe Asn Gln Arg Glu Ser Glu Arg Ile Ser Ser Asn
80 85 90
Arg Ala Ile Pro Asp Thr Arg His Leu Arg Cys Thr Leu Leu Val
95 100 105
Tyr Cys Thr Asp Leu Pro Pro Thr Ser Ile Ile Ile Thr Phe His
110 115 120
Asn Glu Ala Arg Ser Thr Leu Leu Arg Thr Ile Arg Ser Val Leu
125 130 135
Asn Arg Thr Pro Thr His Leu Ile Arg Glu Ile Ile Leu Val Asp
140 145 150
Asp Phe Ser Asn Asp Pro Asp Asp Cys Lys Gln Leu Ile Lys Leu
155 160 165
Pro Lys Val Lys Cys Leu Arg Asn Asn Glu Arg Gln Gly Leu Val
170 175 180
Arg Ser Arg Ile Arg Gly Ala Asp Ile Ala Gln Gly Thr Thr Leu
185 190 195

Thr Phe Leu Asp	Ser His Cys Glu Val	Asn Arg Asp Trp Leu Gln
200	205	210
Pro Leu Leu His	Arg Val Lys Glu Asp	Tyr Thr Arg Val Val Cys
215	220	225
Pro Val Ile Asp	Ile Ile Asn Leu Asp	Thr Phe Thr Tyr Ile Glu
230	235	240
Ser Ala Ser Glu	Leu Arg Gly Gly Phe	Asp Trp Ser Leu His Phe
245	250	255
Gln Trp Glu Gln	Leu Ser Pro Glu Gln	Lys Ala Arg Arg Leu Asp
260	265	270
Pro Thr Glu Pro	Ile Arg Thr Pro Ile	Ile Ala Gly Gly Leu Phe
275	280	285
Val Ile Asp Lys	Ala Trp Phe Asp Tyr	Leu Gly Lys Tyr Asp Met
290	295	300
Asp Met Asp Ile	Trp Gly Gly Glu Asn	Phe Glu Ile Ser Phe Arg
305	310	315
Val Trp Met Cys	Gly Gly Ser Leu Glu	Ile Val Pro Cys Ser Arg
320	325	330
Val Gly His Val	Phe Arg Lys Lys His	Pro Tyr Val Phe Pro Asp
335	340	345
Gly Asn Ala Asn	Thr Tyr Ile Lys Asn	Thr Lys Arg Thr Ala Glu
350	355	360
Val Trp Met Asp	Glu Tyr Lys Gln Tyr	Tyr Tyr Ala Ala Arg Pro
365	370	375
Phe Ala Leu Glu	Arg Pro Phe Gly Asn	Val Glu Ser Arg Leu Asp
380	385	390
Leu Arg Lys Asn	Leu Arg Cys Gln Ser	Phe Lys Trp Tyr Leu Glu
395	400	405
Asn Ile Tyr Pro	Glu Leu Ser Ile Pro	Lys Glu Ser Ser Ile Gln
410	415	420
Lys Gly Asn Ile	Arg Gln Arg Gln Lys	Cys Leu Glu Ser Gln Arg
425	430	435
Gln Asn Asn Gln	Glu Thr Pro Asn Leu	Lys Leu Ser Pro Cys Ala
440	445	450
Lys Val Lys Gly	Glu Asp Ala Lys Ser	Gln Val Trp Ala Phe Thr
455	460	465
Tyr Thr Gln Gln	Ile Leu Gln Glu Glu	Leu Cys Leu Ser Val Ile
470	475	480
Thr Leu Phe Pro	Gly Ala Pro Val Val	Leu Val Leu Cys Lys Asn

	485		490		495
Gly Asp Asp Arg	Gln Gln Trp Thr Lys	Thr Gly Ser His Ile	Glu		
	500		505		510
His Ile Ala Ser	His Leu Cys Leu Asp	Thr Asp Met Phe Gly	Asp		
	515		520		525
Gly Thr Glu Asn	Gly Lys Glu Ile Val	Val Asn Pro Cys Glu	Ser		
	530		535		540
Ser Leu Met Ser	Gln His Trp Asp Met	Val Ser Ser			
	545		550		

<210> 197
 <211> 4060
 <212> DNA
 <213> Homo Sapien

<400> 197
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 acccgcacc acggagcgcc acatcgccgt acacaagcgg cttgtgctgg 150
 ccttcgctgt gtccctcgtg gcattgctcg cggtcacaat gtcgctgtg 200
 ctgctcagcc tgcgcttcga cgagtgcggg gcgagtgcc a gccaggcgc 250
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 gccacctgaa gccgctgcac tacaatctga tgctcaccgc cttcatggag 500
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 caccgctac gtagtgctgc acgcttccc agtggcggtg gagaaagtgc 600
 agctggccga ggaccggggc ttcggggctg tccctgtagc cggttttttc 650
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aaaaaaaaaa 4060

<210> 198
<211> 1024
<212> PRT
<213> Homo Sapien

<400> 198
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Glu Arg His Ile Ala Val His Lys Arg Leu Val Leu Ala Phe Ala
35 40 45
Val Ser Leu Val Ala Leu Leu Ala Val Thr Met Leu Ala Val Leu
50 55 60
Leu Ser Leu Arg Phe Asp Glu Cys Gly Ala Ser Ala Thr Pro Gly
65 70 75
Ala Asp Gly Gly Pro Ser Gly Phe Pro Glu Arg Gly Gly Asn Gly
80 85 90
Ser Leu Pro Gly Ser Ala Arg Arg Asn His His Ala Gly Gly Asp
95 100 105
Ser Trp Gln Pro Glu Ala Gly Gly Val Ala Ser Pro Gly Thr Thr
110 115 120
Ser Ala Gln Pro Pro Ser Glu Glu Glu Arg Glu Pro Trp Glu Pro
125 130 135
Trp Thr Gln Leu Arg Leu Ser Gly His Leu Lys Pro Leu His Tyr
140 145 150
Asn Leu Met Leu Thr Ala Phe Met Glu Asn Phe Thr Phe Ser Gly
155 160 165
Glu Val Asn Val Glu Ile Ala Cys Arg Asn Ala Thr Arg Tyr Val
170 175 180
Val Leu His Ala Ser Arg Val Ala Val Glu Lys Val Gln Leu Ala
185 190 195
Glu Asp Arg Ala Phe Gly Ala Val Pro Val Ala Gly Phe Phe Leu
200 205 210

Lys	Asn	Asn	Phe	Asn	Gly	Ser	Leu	Val	Gln	Ala	Ser	Tyr	Gln	His	
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Glu	Glu	Leu	Arg	Arg	Glu	Val	Ile	Met	Leu	Ala	Cys	Ser	Phe	Gly	
				815					820					825	
Asn	Lys	His	Cys	His	Gln	Gln	Ala	Ser	Thr	Leu	Ile	Ser	Asp	Trp	
				830					835					840	
Ile	Ser	Ser	Asn	Arg	Asn	Arg	Ile	Pro	Leu	Asn	Val	Arg	Asp	Ile	
				845					850					855	
Val	Tyr	Cys	Thr	Gly	Val	Ser	Leu	Leu	Asp	Glu	Asp	Val	Trp	Glu	
				860					865					870	
Phe	Ile	Trp	Met	Lys	Phe	His	Ser	Thr	Thr	Ala	Val	Ser	Glu	Lys	
				875					880					885	
Lys	Ile	Leu	Leu	Glu	Ala	Leu	Thr	Cys	Ser	Asp	Asp	Arg	Asn	Leu	
				890					895					900	
Leu	Asn	Arg	Leu	Leu	Asn	Leu	Ser	Leu	Asn	Ser	Glu	Val	Val	Leu	
				905					910					915	
Asp	Gln	Asp	Ala	Ile	Asp	Val	Ile	Ile	His	Val	Ala	Arg	Asn	Pro	
				920					925					930	
His	Gly	Arg	Asp	Leu	Ala	Trp	Lys	Phe	Phe	Arg	Asp	Lys	Trp	Lys	
				935					940					945	
Ile	Leu	Asn	Thr	Arg	Tyr	Gly	Glu	Ala	Leu	Phe	Met	Tyr	Ser	Lys	
				950					955					960	
Leu	Ile	Ser	Gly	Val	Thr	Glu	Phe	Leu	Asn	Thr	Glu	Gly	Glu	Leu	
				965					970					975	
Lys	Glu	Leu	Lys	Asn	Phe	Met	Lys	Asn	Tyr	Asp	Gly	Val	Ala	Ala	
				980					985					990	
Ala	Ser	Phe	Ser	Arg	Ala	Val	Glu	Thr	Val	Glu	Ala	Asn	Val	Arg	
				995					1000					1005	
Trp	Lys	Met	Leu	Tyr	Gln	Asp	Glu	Leu	Phe	Gln	Trp	Leu	Gly	Lys	
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Ala	Leu	Arg	His												

<210> 199

<211> 3461

<212> DNA

<213> Homo Sapien

<400> 199

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cgetteccct ttctegctca ccgcgcgcct ccttecccag ctccctcgcc 150
 gtccgcccgc cccacagcca gcggctccgc gcccctgca gccacgatgc 200
 ccgcggcccg gccgcccgc gcgggactcc gcgggatctc gctgttcctc 250
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Glu Ala Arg Pro Lys His Ala Leu Pro Pro Lys Lys Lys Leu Pro
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Ser Leu Lys Gln Val Asn Ser Ala Arg Lys Gln Leu Arg Pro Lys
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Leu Tyr Ser Ser	Thr Pro Asp Leu Thr Ile Gln Phe His Ser Asp				
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 Pro Leu Cys Ala Met Gln Leu Phe Ser His Met His Ala Val Ile
 215 220 225

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Pro Asp Asp Arg	Val Val Val Ala Ala	Thr Arg Leu Asp Ser	Arg
275		280	285
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Pro Asp Val Thr	Thr Leu Pro Arg Asn	Val Met Phe Val Phe	Phe
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Gln Gly Glu Thr	Phe Asp Tyr Ile Gly	Ser Ser Arg Met Val	Tyr
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Arg Asn Gln Val	Glu Asp Leu Leu Ala	Thr Leu Glu Lys Ser	Gly
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<210> 204

<211> 790

<212> PRT

<213> Homo Sapien

<400> 204

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Leu	Leu	Val	Pro	Thr	Met	Leu	Leu	Lys	Ser	Leu	Gly	Glu	Asp	Val
				20					25				30	
Ile	Phe	His	Pro	Glu	Gly	Glu	Phe	Asp	Ser	Tyr	Glu	Val	Thr	Ile
				35					40				45	
Pro	Glu	Lys	Leu	Ser	Phe	Arg	Gly	Glu	Val	Gln	Gly	Val	Val	Ser
				50					55				60	
Pro	Val	Ser	Tyr	Leu	Leu	Gln	Leu	Lys	Gly	Lys	Lys	His	Val	Leu
				65					70				75	

His	Leu	Trp	Pro	Lys	Arg	Leu	Leu	Leu	Pro	Arg	His	Leu	Arg	Val	80	85	90
Phe	Ser	Phe	Thr	Glu	His	Gly	Glu	Leu	Leu	Glu	Asp	His	Pro	Tyr	95	100	105
Ile	Pro	Lys	Asp	Cys	Asn	Tyr	Met	Gly	Ser	Val	Lys	Glu	Ser	Leu	110	115	120
Asp	Ser	Lys	Ala	Thr	Ile	Ser	Thr	Cys	Met	Gly	Gly	Leu	Arg	Gly	125	130	135
Val	Phe	Asn	Ile	Asp	Ala	Lys	His	Tyr	Gln	Ile	Glu	Pro	Leu	Lys	140	145	150
Ala	Ser	Pro	Ser	Phe	Glu	His	Val	Val	Tyr	Leu	Leu	Lys	Lys	Glu	155	160	165
Gln	Phe	Gly	Asn	Gln	Val	Cys	Gly	Leu	Ser	Asp	Asp	Glu	Ile	Glu	170	175	180
Trp	Gln	Met	Ala	Pro	Tyr	Glu	Asn	Lys	Ala	Arg	Leu	Arg	Asp	Phe	185	190	195
Pro	Gly	Ser	Tyr	Lys	His	Pro	Lys	Tyr	Leu	Glu	Leu	Ile	Leu	Leu	200	205	210
Phe	Asp	Gln	Ser	Arg	Tyr	Arg	Phe	Val	Asn	Asn	Asn	Leu	Ser	Gln	215	220	225
Val	Ile	His	Asp	Ala	Ile	Leu	Leu	Thr	Gly	Ile	Met	Asp	Thr	Tyr	230	235	240
Phe	Gln	Asp	Val	Arg	Met	Arg	Ile	His	Leu	Lys	Ala	Leu	Glu	Val	245	250	255
Trp	Thr	Asp	Phe	Asn	Lys	Ile	Arg	Val	Gly	Tyr	Pro	Glu	Leu	Ala	260	265	270
Glu	Val	Leu	Gly	Arg	Phe	Val	Ile	Tyr	Lys	Lys	Ser	Val	Leu	Asn	275	280	285
Ala	Arg	Leu	Ser	Ser	Asp	Trp	Ala	His	Leu	Tyr	Leu	Gln	Arg	Lys	290	295	300
Tyr	Asn	Asp	Ala	Leu	Ala	Trp	Ser	Phe	Gly	Lys	Val	Cys	Ser	Leu	305	310	315
Glu	Tyr	Ala	Gly	Ser	Val	Ser	Thr	Leu	Leu	Asp	Thr	Asn	Ile	Leu	320	325	330
Ala	Pro	Ala	Thr	Trp	Ser	Ala	His	Glu	Leu	Gly	His	Ala	Val	Gly	335	340	345
Met	Ser	His	Asp	Glu	Gln	Tyr	Cys	Gln	Cys	Arg	Gly	Arg	Leu	Asn	350	355	360
Cys	Ile	Met	Gly	Ser	Gly	Arg	Thr	Gly	Phe	Ser	Asn	Cys	Ser	Tyr			

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<210> 206

<211> 616

<212> PRT

<213> Homo Sapien

<400> 206

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				20					25					30
Leu	Asn	Phe	Asn	Gln	Tyr	Tyr	Glu	Ala	Cys	Arg	Lys	Ala	Ala	Lys
				35					40					45
Ser	Leu	Ile	Lys	Leu	Gly	Leu	Glu	Arg	Phe	His	Gly	Val	Gly	Ile
				50					55					60
Leu	Gly	Phe	Asn	Ser	Ala	Glu	Trp	Phe	Ile	Thr	Ala	Val	Gly	Ala
				65					70					75
Ile	Leu	Ala	Gly	Gly	Leu	Cys	Val	Gly	Ile	Tyr	Ala	Thr	Asn	Ser
				80					85					90
Ala	Glu	Ala	Cys	Gln	Tyr	Val	Ile	Thr	His	Ala	Lys	Val	Asn	Ile
				95					100					105
Leu	Leu	Val	Glu	Asn	Asp	Gln	Gln	Leu	Gln	Lys	Ile	Leu	Ser	Ile
				110					115					120

207
2845
DNA
Homo Sapien

410	415	420
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Ile Asp Asp Glu Gly Trp Leu His Ser Gly Asp Leu Gly Gln Leu		
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Asp Gly Leu Gly Phe Leu Tyr Val Thr Gly His Ile Lys Glu Ile		
455	460	465
Leu Ile Thr Ala Gly Gly Glu Asn Val Pro Pro Ile Pro Val Glu		
470	475	480
Thr Leu Val Lys Lys Lys Ile Pro Ile Ile Ser Asn Ala Met Leu		
485	490	495
Val Gly Asp Lys Leu Lys Phe Leu Ser Met Leu Leu Thr Leu Lys		
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Cys Glu Met Asn Gln Met Ser Gly Glu Pro Leu Asp Lys Leu Asn		
515	520	525
Phe Glu Ala Ile Asn Phe Cys Arg Gly Leu Gly Ser Gln Ala Ser		
530	535	540
Thr Val Thr Glu Ile Val Lys Gln Gln Asp Pro Leu Val Tyr Lys		
545	550	555
Ala Ile Gln Gln Gly Ile Asn Ala Val Asn Gln Glu Ala Met Asn		
560	565	570
Asn Ala Gln Arg Ile Glu Lys Trp Val Ile Leu Glu Lys Asp Phe		
575	580	585
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His

<210> 207
 <211> 2845
 <212> DNA
 <213> Homo Sapien

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<211> 367
<212> PRT
<213> Homo Sapien

<400> 208
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 320 325 330
 Gly Arg Thr His Val Gln Ile Asp Pro Glu Val Ile Asp Gln Leu
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 <211> 2915
 <212> DNA
 <213> Homo Sapien

<400> 209
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 ttattaataa tagtgaattc cttaaaattt gttctatgta cttatattta 2850
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<210> 210

<211> 519

<212> PRT

<213> Homo Sapien

<400> 210

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				20					25					30
Arg	Pro	Arg	Thr	Arg	Arg	Asn	Leu	Leu	Leu	Gly	Thr	Ala	Cys	Ala
				35					40					45
Ile	Tyr	Leu	Gly	Phe	Leu	Val	Ser	Gln	Val	Gly	Arg	Ala	Ser	Leu
				50					55					60
Gln	His	Gly	Gln	Ala	Ala	Glu	Lys	Gly	Pro	His	Arg	Ser	Arg	Asp
				65					70					75
Thr	Ala	Glu	Pro	Ser	Phe	Pro	Glu	Ile	Pro	Leu	Asp	Gly	Thr	Leu
				80					85					90
Ala	Pro	Pro	Glu	Ser	Gln	Gly	Asn	Gly	Ser	Thr	Leu	Gln	Pro	Asn
				95					100					105
Val	Val	Tyr	Ile	Thr	Leu	Arg	Ser	Lys	Arg	Ser	Lys	Pro	Ala	Asn
				110					115					120
Ile	Arg	Gly	Thr	Val	Lys	Pro	Lys	Arg	Arg	Lys	Lys	His	Ala	Val
				125					130					135
Ala	Ser	Ala	Ala	Pro	Gly	Gln	Glu	Ala	Leu	Val	Gly	Pro	Ser	Leu
				140					145					150
Gln	Pro	Gln	Glu	Ala	Ala	Arg	Glu	Ala	Asp	Ala	Val	Ala	Pro	Gly
				155					160					165

Tyr	Ala	Gln	Gly	Ala	Asn	Leu	Val	Lys	Ile	Gly	Glu	Arg	Pro	Trp	
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Arg	Leu	Val	Arg	Gly	Pro	Gly	Val	Arg	Ala	Gly	Gly	Pro	Asp	Phe	
				185					190					195	
Leu	Gln	Pro	Ser	Ser	Arg	Glu	Ser	Asn	Ile	Arg	Ile	Tyr	Ser	Glu	
				200					205					210	
Ser	Ala	Pro	Ser	Trp	Leu	Ser	Lys	Asp	Asp	Ile	Arg	Arg	Met	Arg	
				215					220					225	
Leu	Leu	Ala	Asp	Ser	Ala	Val	Ala	Gly	Leu	Arg	Pro	Val	Ser	Ser	
				230					235					240	
Arg	Ser	Gly	Ala	Arg	Leu	Leu	Val	Leu	Glu	Gly	Gly	Ala	Pro	Gly	
				245					250					255	
Ala	Val	Leu	Arg	Cys	Gly	Pro	Ser	Pro	Cys	Gly	Leu	Leu	Lys	Gln	
				260					265					270	
Pro	Leu	Asp	Met	Ser	Glu	Val	Phe	Ala	Phe	His	Leu	Asp	Arg	Ile	
				275					280					285	
Leu	Gly	Leu	Asn	Arg	Thr	Leu	Pro	Ser	Val	Ser	Arg	Lys	Ala	Glu	
				290					295					300	
Phe	Ile	Gln	Asp	Gly	Arg	Pro	Cys	Pro	Ile	Ile	Leu	Trp	Asp	Ala	
				305					310					315	
Ser	Leu	Ser	Ser	Ala	Ser	Asn	Asp	Thr	His	Ser	Ser	Val	Lys	Leu	
				320					325					330	
Thr	Trp	Gly	Thr	Tyr	Gln	Gln	Leu	Leu	Lys	Gln	Lys	Cys	Trp	Gln	
				335					340					345	
Asn	Gly	Arg	Val	Pro	Lys	Pro	Glu	Ser	Gly	Cys	Thr	Glu	Ile	His	
				350					355					360	
His	His	Glu	Trp	Ser	Lys	Met	Ala	Leu	Phe	Asp	Phe	Leu	Leu	Gln	
				365					370					375	
Ile	Tyr	Asn	Arg	Leu	Asp	Thr	Asn	Cys	Cys	Gly	Phe	Arg	Pro	Arg	
				380					385					390	
Lys	Glu	Asp	Ala	Cys	Val	Gln	Asn	Gly	Leu	Arg	Pro	Lys	Cys	Asp	
				395					400					405	
Asp	Gln	Gly	Ser	Ala	Ala	Leu	Ala	His	Ile	Ile	Gln	Arg	Lys	His	
				410					415					420	
Asp	Pro	Arg	His	Leu	Val	Phe	Ile	Asp	Asn	Lys	Gly	Phe	Phe	Asp	
				425					430					435	
Arg	Ser	Glu	Asp	Asn	Leu	Asn	Phe	Lys	Leu	Leu	Glu	Gly	Ile	Lys	
				440					445					450	
Glu	Phe	Pro	Ala	Ser	Ala	Val	Ser	Val	Leu	Lys	Ser	Gln	His	Leu	

455	460	465
Arg Gln Lys Leu Leu Gln Ser Leu Phe	Leu Asp Lys Val Tyr Trp	
470	475	480
Glu Ser Gln Gly Gly Arg Gln Gly Ile	Glu Lys Leu Ile Asp Val	
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Ile Glu His Arg Ala Lys Ile Leu Ile	Thr Tyr Ile Asn Ala His	
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515		

<210> 211
 <211> 3266
 <212> DNA
 <213> Homo Sapien

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<210> 212
 <211> 747
 <212> PRT
 <213> Homo Sapien

<400> 212
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 20 25 30
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 35 40 45
 Gln Ala Asp Thr Val Arg Gly Ala Val Leu Gly Ser Arg Ser Ala
 50 55 60
 Trp Ala Val Glu Phe Phe Ala Ser Trp Cys Gly His Cys Ile Ala
 65 70 75
 Phe Ala Pro Thr Trp Lys Ala Leu Ala Glu Asp Val Lys Ala Trp

665		670		675
Lys Gln Leu Val Asp Ile Pro Glu Gly	Gln Leu Glu Ala Arg Ala			
680	685	690		
Gly Arg Gly Arg Gly Gln Trp Leu Gln	Val Leu Gly Gly Gly Phe			
695	700	705		
Ser Tyr Leu Asp Ile Ser Leu Cys Val	Gly Leu Tyr Ser Leu Ser			
710	715	720		
Phe Met Gly Leu Leu Ala Met Tyr Thr	Tyr Phe Gln Ala Lys Ile			
725	730	735		
Arg Ala Leu Lys Gly His Ala Gly His	Pro Ala Ala			
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<210> 213
 <211> 1955
 <212> DNA
 <213> Homo Sapien

<400> 213
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 atctacacct caaccctcct agtcaccacc tgaaataaat gttagggaaa 1950
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<210> 214

<211> 245

<212> PRT

<213> Homo Sapien

<400> 214

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				20					25					30
Gln	Arg	Asn	Leu	Lys	Gly	Val	Val	Ser	Ala	Lys	Asn	Asp	Ile	Arg
				35					40					45

Val	Glu	Ile	Val	His	Lys	Glu	Pro	Ala	Ser	Gly	Arg	Glu	Gly	Glu		50	55	60
Glu	His	Ser	Thr	Ile	Lys	Gln	Leu	Met	Met	Asp	Arg	Gly	Glu	Phe		65	70	75
Gln	Gln	Asp	Ser	Val	Leu	Lys	Gln	Leu	Glu	Val	Leu	Lys	Glu	Glu		80	85	90
Glu	Lys	Glu	Phe	Gln	Asn	Leu	Lys	Asp	Pro	Thr	Asn	Gly	Tyr	Tyr		95	100	105
Ser	Val	Asn	Thr	Phe	Lys	Glu	His	His	Ser	Thr	Pro	Thr	Ile	Ser		110	115	120
Leu	Ser	Ser	Cys	Gln	Pro	Asp	Leu	Arg	Pro	Ala	Gly	Lys	Gln	Arg		125	130	135
Val	Pro	Thr	Gly	Met	Ser	Phe	Thr	Asn	Ile	Tyr	Ser	Thr	Leu	Ser		140	145	150
Gly	Gln	Gly	Arg	Leu	Tyr	Asp	Tyr	Gly	Gln	Arg	Phe	Val	Leu	Gly		155	160	165
Met	Gly	Ser	Ser	Ser	Ile	Glu	Leu	Cys	Glu	Arg	Glu	Phe	Gln	Arg		170	175	180
Gly	Ser	Leu	Ser	Asp	Ser	Ser	Ser	Phe	Leu	Asp	Thr	Gln	Cys	Asp		185	190	195
Ser	Ser	Val	Ser	Ser	Ser	Gly	Lys	Gln	Asp	Gly	Tyr	Val	Gln	Phe		200	205	210
Asp	Lys	Ala	Ser	Lys	Ala	Ser	Ala	Ser	Ser	Ser	His	His	Ser	Gln		215	220	225
Ser	Ser	Ser	Gln	Asn	Ser	Asp	Pro	Ser	Arg	Pro	Leu	Gln	Arg	Arg		230	235	240
Met	Gln	Thr	His	Val												245		

<210> 215

<211> 1567

<212> DNA

<213> Homo Sapien

<400> 215

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gatgtggatg atgctgggga ctgttctggg gccaggtata atgactggtc 250

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<210> 216
 <211> 379
 <212> PRT
 <213> Homo Sapien

<400> 216

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Ile	Gly	Ala	Gly	Ala	Cys	Tyr	Cys	Ile	Tyr	Arg	Leu	Thr	Arg	Gly	
				20					25					30	
Arg	Lys	Gln	Asn	Lys	Glu	Lys	Met	Ala	Glu	Gly	Gly	Ser	Gly	Asp	
				35					40					45	
Val	Asp	Asp	Ala	Gly	Asp	Cys	Ser	Gly	Ala	Arg	Tyr	Asn	Asp	Trp	
				50					55					60	
Ser	Asp	Asp	Asp	Asp	Asp	Ser	Asn	Glu	Ser	Lys	Ser	Ile	Val	Trp	
				65					70					75	
Tyr	Pro	Pro	Trp	Ala	Arg	Ile	Gly	Thr	Glu	Ala	Gly	Thr	Arg	Ala	
				80					85					90	
Arg	Ala	Arg	Ala	Arg	Ala	Arg	Ala	Thr	Arg	Ala	Arg	Arg	Ala	Val	
				95					100					105	
Gln	Lys	Arg	Ala	Ser	Pro	Asn	Ser	Asp	Asp	Thr	Val	Leu	Ser	Pro	
				110					115					120	
Gln	Glu	Leu	Gln	Lys	Val	Leu	Cys	Leu	Val	Glu	Met	Ser	Glu	Lys	
				125					130					135	
Pro	Tyr	Ile	Leu	Glu	Ala	Ala	Leu	Ile	Ala	Leu	Gly	Asn	Asn	Ala	
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Ala	Tyr	Ala	Phe	Asn	Arg	Asp	Ile	Ile	Arg	Asp	Leu	Gly	Gly	Leu	
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Pro	Ile	Val	Ala	Lys	Ile	Leu	Asn	Thr	Arg	Asp	Pro	Ile	Val	Lys	
				170					175					180	
Glu	Lys	Ala	Leu	Ile	Val	Leu	Asn	Asn	Leu	Ser	Val	Asn	Ala	Glu	
				185					190					195	
Asn	Gln	Arg	Arg	Leu	Lys	Val	Tyr	Met	Asn	Gln	Val	Cys	Asp	Asp	
				200					205					210	
Thr	Ile	Thr	Ser	Arg	Leu	Asn	Ser	Ser	Val	Gln	Leu	Ala	Gly	Leu	
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Arg	Leu	Leu	Thr	Asn	Met	Thr	Val	Thr	Asn	Glu	Tyr	Gln	His	Met	
				230					235					240	
Leu	Ala	Asn	Ser	Ile	Ser	Asp	Phe	Phe	Arg	Leu	Phe	Ser	Ala	Gly	
				245					250					255	
Asn	Glu	Glu	Thr	Lys	Leu	Gln	Val	Leu	Lys	Leu	Leu	Leu	Asn	Leu	
				260					265					270	
Ala	Glu	Asn	Pro	Ala	Met	Thr	Arg	Glu	Leu	Leu	Arg	Ala	Gln	Val	
				275					280					285	

Pro	Ser	Ser	Leu	Gly	Ser	Leu	Phe	Asn	Lys	Lys	Glu	Asn	Lys	Glu	290	295	300
Val	Ile	Leu	Lys	Leu	Leu	Val	Ile	Phe	Glu	Asn	Ile	Asn	Asp	Asn	305	310	315
Phe	Lys	Trp	Glu	Glu	Asn	Glu	Pro	Thr	Gln	Asn	Gln	Phe	Gly	Glu	320	325	330
Gly	Ser	Leu	Phe	Phe	Phe	Leu	Lys	Glu	Phe	Gln	Val	Cys	Ala	Asp	335	340	345
Lys	Val	Leu	Gly	Ile	Glu	Ser	His	His	Asp	Phe	Leu	Val	Lys	Val	350	355	360
Lys	Val	Gly	Lys	Phe	Met	Ala	Lys	Leu	Ala	Glu	His	Met	Phe	Pro	365	370	375

Lys Ser Gln Glu

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 35 40 45
 Pro Leu Leu Leu Ile Ser Leu Ala Phe Ala Gln Glu Ile Ser Ile
 50 55 60
 Gly Thr Gln Ile Ser Cys Phe Ser Pro Ser Ser Phe Ser Trp Arg
 65 70 75
 Gln Ala Ala Phe Val Asp Ser Tyr Cys Trp Ala Ala Val Gln Gln
 80 85 90

Lys	Asn	Ser	Leu	Gln	Ser	Glu	Ser	Gly	Asn	Leu	Pro	Leu	Trp	Leu	95	100	105
His	Lys	Phe	Phe	Pro	Tyr	Ile	Leu	Leu	Leu	Phe	Ala	Ile	Leu	Leu	110	115	120
Tyr	Leu	Pro	Pro	Leu	Phe	Trp	Arg	Phe	Ala	Ala	Ala	Pro	His	Ile	125	130	135
Cys	Ser	Asp	Leu	Lys	Phe	Ile	Met	Glu	Glu	Leu	Asp	Lys	Val	Tyr	140	145	150
Asn	Arg	Ala	Ile	Lys	Ala	Ala	Lys	Ser	Ala	Arg	Asp	Leu	Asp	Met	155	160	165
Arg	Asp	Gly	Ala	Cys	Ser	Val	Pro	Gly	Val	Thr	Glu	Asn	Leu	Gly	170	175	180
Gln	Ser	Leu	Trp	Glu	Val	Ser	Glu	Ser	His	Phe	Lys	Tyr	Pro	Ile	185	190	195
Val	Glu	Gln	Tyr	Leu	Lys	Thr	Lys	Lys	Asn	Ser	Asn	Asn	Leu	Ile	200	205	210
Ile	Lys	Tyr	Ile	Ser	Cys	Arg	Leu	Leu	Thr	Leu	Ile	Ile	Ile	Leu	215	220	225
Leu	Ala	Cys	Ile	Tyr	Leu	Gly	Tyr	Tyr	Phe	Ser	Leu	Ser	Ser	Leu	230	235	240
Ser	Asp	Glu	Phe	Val	Cys	Ser	Ile	Lys	Ser	Gly	Ile	Leu	Arg	Asn	245	250	255
Asp	Ser	Thr	Val	Pro	Asp	Gln	Phe	Gln	Cys	Lys	Leu	Ile	Ala	Val	260	265	270
Gly	Ile	Phe	Gln	Leu	Leu	Ser	Val	Ile	Asn	Leu	Val	Val	Tyr	Val	275	280	285
Leu	Leu	Ala	Pro	Val	Val	Val	Tyr	Thr	Leu	Phe	Val	Pro	Phe	Arg	290	295	300
Gln	Lys	Thr	Asp	Val	Leu	Lys	Val	Tyr	Glu	Ile	Leu	Pro	Thr	Phe	305	310	315
Asp	Val	Leu	His	Phe	Lys	Ser	Glu	Gly	Tyr	Asn	Asp	Leu	Ser	Leu	320	325	330
Tyr	Asn	Leu	Phe	Leu	Glu	Glu	Asn	Ile	Ser	Glu	Val	Lys	Ser	Tyr	335	340	345
Lys	Cys	Leu	Lys	Val	Leu	Glu	Asn	Ile	Lys	Ser	Ser	Gly	Gln	Gly	350	355	360
Ile	Asp	Pro	Met	Leu	Leu	Leu	Thr	Asn	Leu	Gly	Met	Ile	Lys	Met	365	370	375
Asp	Val	Val	Asp	Gly	Lys	Thr	Pro	Met	Ser	Ala	Glu	Met	Arg	Glu			

<211> 171
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 <213> Homo Sapien

<400> 220

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				20					25					30
Ser	Cys	Tyr	Pro	Arg	Gly	Thr	Leu	Ser	Gln	Ala	Val	Asp	Ala	Leu
				35					40					45
Tyr	Ile	Lys	Ala	Ala	Trp	Leu	Lys	Ala	Thr	Ile	Pro	Glu	Asp	Arg
				50					55					60
Ile	Lys	Asn	Ile	Arg	Leu	Leu	Lys	Lys	Lys	Thr	Lys	Lys	Gln	Phe
				65					70					75
Met	Lys	Asn	Cys	Gln	Phe	Gln	Glu	Gln	Leu	Leu	Ser	Phe	Phe	Met
				80					85					90
Glu	Asp	Val	Phe	Gly	Gln	Leu	Gln	Leu	Gln	Gly	Cys	Lys	Lys	Ile
				95					100					105
Arg	Phe	Val	Glu	Asp	Phe	His	Ser	Leu	Arg	Gln	Lys	Leu	Ser	His
				110					115					120
Cys	Ile	Ser	Cys	Ala	Ser	Ser	Ala	Arg	Glu	Met	Lys	Ser	Ile	Thr
				125					130					135
Arg	Met	Lys	Arg	Ile	Phe	Tyr	Arg	Ile	Gly	Asn	Lys	Gly	Ile	Tyr
				140					145					150
Lys	Ala	Ile	Ser	Glu	Leu	Asp	Ile	Leu	Leu	Ser	Trp	Ile	Lys	Lys
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Leu	Leu	Glu	Ser	Ser	Gln									
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<210> 221
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<400> 221

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Arg	Val	Arg	Gln	Val	Glu	Ser	Asn	Pro	Leu	Tyr	Gln	Gly	Thr	Ala	110	115	120
Ser	Ser	Ala	Asp	Val	Ala	Leu	Val	Glu	Leu	Glu	Ala	Pro	Val	Pro	125	130	135
Phe	Thr	Asn	Tyr	Ile	Leu	Pro	Val	Cys	Leu	Pro	Asp	Pro	Ser	Val	140	145	150
Ile	Phe	Glu	Thr	Gly	Met	Asn	Cys	Trp	Val	Thr	Gly	Trp	Gly	Ser	155	160	165
Pro	Ser	Glu	Glu	Asp	Leu	Leu	Pro	Glu	Pro	Arg	Ile	Leu	Gln	Lys	170	175	180
Leu	Ala	Val	Pro	Ile	Ile	Asp	Thr	Pro	Lys	Cys	Asn	Leu	Leu	Tyr	185	190	195
Ser	Lys	Asp	Thr	Glu	Phe	Gly	Tyr	Gln	Pro	Lys	Thr	Ile	Lys	Asn	200	205	210
Asp	Met	Leu	Cys	Ala	Gly	Phe	Glu	Glu	Gly	Lys	Lys	Asp	Ala	Cys	215	220	225
Lys	Gly	Asp	Ser	Gly	Gly	Pro	Leu	Val	Cys	Leu	Val	Gly	Gln	Ser	230	235	240
Trp	Leu	Gln	Ala	Gly	Val	Ile	Ser	Trp	Gly	Glu	Gly	Cys	Ala	Arg	245	250	255
Gln	Asn	Arg	Pro	Gly	Val	Tyr	Ile	Arg	Val	Thr	Ala	His	His	Asn	260	265	270
Trp	Ile	His	Arg	Ile	Ile	Pro	Lys	Leu	Gln	Phe	Gln	Pro	Ala	Arg	275	280	285
Leu	Gly	Gly	Gln	Lys											290		

<210> 223

<211> 1661

<212> DNA

<213> Homo Sapien

<400> 223

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 gtgagggggg cgggggcctg gcgggaggcc tggcccttc ctcgtccttt 1400
 ccttttgctt ttgagaccaa accaagtgtt tccaaattct tttggtgcaa 1450
 ttgaggagat atgccagatg cttaaacaca tttaattgct gtcagattaa 1500
 ttccatgatc actaaagagt tgctgctttt ttcataattta tttttgtaaa 1550
 tgattctgtg cccaggagca gctgggggtt ccacctcagg gtggggcggg 1600
 caggaccccg tctccccagg tgtcggagcc tgacctgaat taaagtactg 1650
 actgctcgcc a 1661

<210> 224
 <211> 449
 <212> PRT
 <213> Homo Sapien

<400> 224

Met	Trp	Thr	Ala	Leu	Val	Leu	Ile	Trp	Ile	Phe	Ser	Leu	Ser	Leu	1	5	10	15
Ser	Glu	Ser	His	Ala	Ala	Ser	Asn	Asp	Pro	Arg	Asn	Phe	Val	Pro	20	25	30	
Asn	Lys	Met	Trp	Lys	Gly	Leu	Val	Lys	Arg	Asn	Ala	Ser	Val	Glu	35	40	45	
Thr	Val	Asp	Asn	Lys	Thr	Ser	Glu	Asp	Val	Thr	Met	Ala	Ala	Ala	50	55	60	
Ser	Pro	Val	Thr	Leu	Thr	Lys	Gly	Thr	Ser	Ala	Ala	His	Leu	Asn	65	70	75	
Ser	Met	Glu	Val	Thr	Thr	Glu	Asp	Thr	Ser	Arg	Thr	Asp	Val	Ser	80	85	90	
Glu	Pro	Ala	Thr	Ser	Gly	Val	Ala	Ala	Asp	Gly	Val	Thr	Ser	Ile	95	100	105	
Ala	Pro	Thr	Ala	Val	Ala	Ser	Ser	Thr	Thr	Ala	Ala	Ser	Ile	Thr	110	115	120	
Thr	Ala	Ala	Ser	Ser	Met	Thr	Val	Ala	Ser	Ser	Ala	Pro	Thr	Thr	125	130	135	
Ala	Ala	Ser	Ser	Thr	Thr	Val	Ala	Ser	Ile	Ala	Pro	Thr	Thr	Ala	140	145	150	
Ala	Ser	Ser	Met	Thr	Ala	Ala	Ser	Ser	Thr	Pro	Met	Thr	Leu	Ala	155	160	165	
Leu	Pro	Ala	Pro	Thr	Ser	Thr	Ser	Thr	Gly	Arg	Thr	Pro	Ser	Thr	170	175	180	
Thr	Ala	Thr	Gly	His	Pro	Ser	Leu	Ser	Thr	Ala	Leu	Ala	Gln	Val	185	190	195	
Pro	Lys	Ser	Ser	Ala	Leu	Pro	Arg	Thr	Ala	Thr	Leu	Ala	Thr	Leu	200	205	210	
Ala	Thr	Arg	Ala	Gln	Thr	Val	Ala	Thr	Thr	Ala	Asn	Thr	Ser	Ser	215	220	225	
Pro	Met	Ser	Thr	Arg	Pro	Ser	Pro	Ser	Lys	His	Met	Pro	Ser	Asp	230	235	240	
Thr	Ala	Ala	Ser	Pro	Val	Pro	Pro	Met	Arg	Pro	Gln	Ala	Gln	Gly	245	250	255	
Pro	Ile	Ser	Gln	Val	Ser	Val	Asp	Gln	Pro	Val	Val	Asn	Thr	Thr				

260										265					270				
Asn	Lys	Ser	Thr	Pro	Met	Pro	Ser	Asn	Thr	Thr	Pro	Glu	Pro	Ala					
				275					280					285					
Pro	Thr	Pro	Thr	Val	Val	Thr	Thr	Thr	Lys	Ala	Gln	Ala	Arg	Glu					
				290					295					300					
Pro	Thr	Ala	Ser	Pro	Val	Pro	Val	Pro	His	Thr	Ser	Pro	Ile	Pro					
				305					310					315					
Glu	Met	Glu	Ala	Met	Ser	Pro	Thr	Thr	Gln	Pro	Ser	Pro	Met	Pro					
				320					325					330					
Tyr	Thr	Gln	Arg	Ala	Ala	Gly	Pro	Gly	Thr	Ser	Gln	Ala	Pro	Glu					
				335					340					345					
Gln	Val	Glu	Thr	Glu	Ala	Thr	Pro	Gly	Thr	Asp	Ser	Thr	Gly	Pro					
				350					355					360					
Thr	Pro	Arg	Ser	Ser	Gly	Gly	Thr	Lys	Met	Pro	Ala	Thr	Asp	Ser					
				365					370					375					
Cys	Gln	Pro	Ser	Thr	Gln	Gly	Gln	Tyr	Met	Val	Val	Thr	Thr	Glu					
				380					385					390					
Pro	Leu	Thr	Gln	Ala	Val	Val	Asp	Lys	Thr	Leu	Leu	Leu	Val	Val					
				395					400					405					
Leu	Leu	Leu	Gly	Val	Thr	Leu	Phe	Ile	Thr	Val	Leu	Val	Leu	Phe					
				410					415					420					
Ala	Leu	Gln	Ala	Tyr	Glu	Ser	Tyr	Lys	Lys	Lys	Asp	Tyr	Thr	Gln					
				425					430					435					
Val	Asp	Tyr	Leu	Ile	Asn	Gly	Met	Tyr	Ala	Asp	Ser	Glu	Met						
				440					445										

<210> 225

<211> 1971

<212> DNA

<213> Homo Sapien

<400> 225

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ggaaggcgct caaggtgcg cggccggggc gcgctactgg gggcgccctc 50
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aaggctgcmc tttccctacg gccccctcgc cttcctccgg cacggcggca 150
acggagattt cctctcgggg aaactacgcg gacccctttt ggggacccct 200
gccccgcccc agttctccgc cccctccctt ttgctggggc gcctgggctg 250
gcccgcgcag gggaggaggc tctggcagcc tgggcaggga ggcggcgggg 300
ggccgcggag ccgctggcca tcgattctcc ccgccatgtg acgccgtcct 350

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tagccctgcg accccagcg cgtcccgggc ctgcgcctcc gccccgccgc 400
 gcagcgcacg atgcttctgc cgggacgcgc acgccaaccg ccgacgcccc 450
 agcccgtgca gcatcccggc ctccgccggc aggtagagcc gccggggcag 500
 ctctgcgcc tcttctactg cactgtcctg gtctgtctca aagagatctc 550
 agcgtcacc gacttctctg gttacctaac caaactcctg caaaaccaca 600
 ccacctatgc ctgtgatggg gactatttga atctacagtg ccctcggcat 650
 tctacgataa gtgtccaatc ggcatthttat gggcaagatt accaaatgtg 700
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 tactcacagc gattgatcca gccattgcta atctaaaacc ttctttgaag 1250
 cagaaagatg gtgaatatgg tataaacttc gacccaagcg gatcgaaggt 1300
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 gaagtgacaa ggtcgaggag gacagcgagg atgaagaaga ggaggaggac 1550
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 agcgcaggga gcaaatacatt caggaaatat ggatgaacag tggtttggac 1700
 acctcgctcc caagaaacat gggccagttc tactgaaaac cacatgcac 1750
 ttgatgcgat cgcactttct gaagaaggaa ggatcccaaa tgccctcca 1800

gttctggttc acctgtacct tctatgaagg agaattcgtc atgtcattca 1850
 acactcgtga ggccaggaag ctattaaagg gatgtttcaa gctgtttcta 1900
 gcacattcca aaataaatga ggagggagga aaaaaaaaaa aaaaaaaaaa 1950
 aaaaaaaaaa aaaaaaaaaa a 1971

<210> 226
 <211> 441
 <212> PRT
 <213> Homo Sapien

<400> 226
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 Val Gln His Pro Gly Leu Arg Arg Gln Val Glu Pro Pro Gly Gln
 20 25 30
 Leu Leu Arg Leu Phe Tyr Cys Thr Val Leu Val Cys Ser Lys Glu
 35 40 45
 Ile Ser Ala Leu Thr Asp Phe Ser Gly Tyr Leu Thr Lys Leu Leu
 50 55 60
 Gln Asn His Thr Thr Tyr Ala Cys Asp Gly Asp Tyr Leu Asn Leu
 65 70 75
 Gln Cys Pro Arg His Ser Thr Ile Ser Val Gln Ser Ala Phe Tyr
 80 85 90
 Gly Gln Asp Tyr Gln Met Cys Ser Ser Gln Lys Pro Ala Ser Gln
 95 100 105
 Arg Glu Asp Ser Leu Thr Cys Val Ala Ala Thr Thr Phe Gln Lys
 110 115 120
 Val Leu Asp Glu Cys Gln Asn Gln Arg Ala Cys His Leu Leu Val
 125 130 135
 Asn Ser Arg Val Phe Gly Pro Asp Leu Cys Pro Gly Ser Ser Lys
 140 145 150
 Tyr Leu Leu Val Ser Phe Lys Cys Gln Pro Asn Glu Leu Lys Asn
 155 160 165
 Lys Thr Val Cys Glu Asp Gln Glu Leu Lys Leu His Cys His Glu
 170 175 180
 Ser Lys Phe Leu Asn Ile Tyr Ser Ala Thr Tyr Gly Arg Arg Thr
 185 190 195
 Gln Glu Arg Asp Ile Cys Ser Ser Lys Ala Glu Arg Leu Pro Pro
 200 205 210
 Phe Asp Cys Leu Ser Tyr Ser Ala Leu Gln Val Leu Ser Arg Arg
 215 220 225

Cys	Tyr	Gly	Lys	Gln	Arg	Cys	Lys	Ile	Ile	Val	Asn	Asn	His	His	230	235	240
Phe	Gly	Ser	Pro	Cys	Leu	Pro	Gly	Val	Lys	Lys	Tyr	Leu	Thr	Val	245	250	255
Thr	Tyr	Ala	Cys	Val	Pro	Lys	Asn	Ile	Leu	Thr	Ala	Ile	Asp	Pro	260	265	270
Ala	Ile	Ala	Asn	Leu	Lys	Pro	Ser	Leu	Lys	Gln	Lys	Asp	Gly	Glu	275	280	285
Tyr	Gly	Ile	Asn	Phe	Asp	Pro	Ser	Gly	Ser	Lys	Val	Leu	Arg	Lys	290	295	300
Asp	Gly	Ile	Leu	Val	Ser	Asn	Ser	Leu	Ala	Ala	Phe	Ala	Tyr	Ile	305	310	315
Arg	Ala	His	Pro	Glu	Arg	Ala	Ala	Leu	Leu	Phe	Val	Ser	Ser	Val	320	325	330
Cys	Ile	Gly	Leu	Ala	Leu	Thr	Leu	Cys	Ala	Leu	Val	Ile	Arg	Glu	335	340	345
Ser	Cys	Ala	Lys	Asp	Phe	Arg	Asp	Leu	Gln	Leu	Gly	Arg	Glu	Gln	350	355	360
Leu	Val	Pro	Gly	Ser	Asp	Lys	Val	Glu	Glu	Asp	Ser	Glu	Asp	Glu	365	370	375
Glu	Glu	Glu	Glu	Asp	Pro	Ser	Glu	Ser	Asp	Phe	Pro	Gly	Glu	Leu	380	385	390
Ser	Gly	Phe	Cys	Arg	Thr	Ser	Tyr	Pro	Ile	Tyr	Ser	Ser	Ile	Glu	395	400	405
Ala	Ala	Glu	Leu	Ala	Glu	Arg	Ile	Glu	Arg	Arg	Glu	Gln	Ile	Ile	410	415	420
Gln	Glu	Ile	Trp	Met	Asn	Ser	Gly	Leu	Asp	Thr	Ser	Leu	Pro	Arg	425	430	435
Asn	Met	Gly	Gln	Phe	Tyr										440		

<210> 227

<211> 840

<212> DNA

<213> Homo Sapien

<400> 227

ggcagcaggt ggaagggctt ttacaaacag attgctggcc ccacccccca 50

gaattttctca tcaggagtgg gcaagaccaa tcatttgcac ttctgacaag 100

ttcccaggag ctgcagctgc tggccctgga accacacttt gagaaccact 150

gcttttagacc aaacaccaaa ggaagatgca gccaccctcc tttacatgtc 200

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acaacgctca ggggccatga gtacctcagg ctgtccagct gagctccacc 250
tgcagcagcc gagattcccg actcgctcca ccattggggg ctaggagtga 300
agcgtgtcac catggtcagc tcatggccag ccaggaaagc ctctctgctg 350
tgcgtctgtg cagttcttgt tcttccttgg aggactcttg gatcgctgt 400
gatcttggcc aggagaccag gtgcctgggt cccttccttg aaggggacaa 450
gttacacacc ccagcccat tttccacca acttctacat gccttgggag 500
aaccttctac atgttggtg ccccttccc ctatttcagc agtgcccagt 550
cctgcttata aacctgaggc ctgctcccca taccttcctt gtgcaagtgc 600
cagccgttat tccaggcagc ccaatgttgt tgaggccaga tggattcctg 650
gaagcagctg gcccatggat gtgagtcac acagtattct agaaacagag 700
aagaggtctt aacctaatgc gcatagagaa attgttctca ttgtaaacad 750
accctgtcc ttagctgatc taggtggaag cccagcttca tgtgctaggg 800
ggcatgataa tgataataaa ggaattgtat ctaggactaa 840

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<210> 228
<211> 120
<212> PRT
<213> Homo Sapien

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<400> 228
Met Val Ser Ser Trp Pro Ala Arg Lys Ala Ser Leu Leu Cys Val
 1          5          10          15
Cys Ala Val Leu Val Leu Pro Trp Arg Thr Leu Gly Ser Pro Val
          20          25          30
Ile Leu Ala Arg Arg Pro Gly Ala Trp Val Pro Ser Trp Lys Gly
          35          40          45
Thr Ser Tyr Thr Pro Gln Pro His Phe Pro Thr Asn Phe Tyr Met
          50          55          60
Pro Trp Glu Asn Leu Leu His Val Gly Cys Pro Leu Pro Leu Phe
          65          70          75
Gln Gln Cys Pro Val Leu Leu Ile Asn Leu Arg Pro Ala Pro His
          80          85          90
Thr Phe Pro Val Gln Val Pro Ala Val Ile Pro Gly Ser Pro Met
          95          100         105
Leu Leu Arg Pro Asp Gly Phe Leu Glu Ala Ala Gly Pro Trp Met
          110         115         120

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<210> 229
<211> 2837

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<212> DNA
<213> Homo Sapien

<400> 229

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acccgtggat tgctgtgccc tgccctccgg acctggatca tgaaggtgtt 150
gggaagaagc ttcttctggg tgctgtttcc cgtccttccc tgggcggtgc 200
aggctgtgga gcacgaggag gtggcgcagc gtgtgatcaa actgcaccgc 250
gggcgagggg tggctgccat gcagagccgg cagtgggtcc gggacagctg 300
caggaagctc tcagggcttc tccgccagaa gaatgcagtt ctgaacaaac 350
tgaaaactgc aattggagca gtggagaaag acgtgggcct gtcggatgaa 400
gagaaactgt ttcaggtgca cacgtttgaa attttccaga aagagctgaa 450
tgaaagtgaa aattccgttt tccaagctgt ctacggactg cagagagccc 500
tgcaggggga ttacaaagat gtcgtgaaca tgaaggagag cagccggcag 550
cgcttgagg ccctgagaga ggctgcaata aaggaagaaa cagaatatat 600
ggaacttctg gcagcagaaa aacatcaagt tgaagccctt aaaaatatgc 650
aacatcaaaa ccaaagttta tccatgcttg acgagattct tgaagatgta 700
agaaaggcag cggatcgtct ggaggaagag atagaggaac atgcttttga 750
cgacaataaa tcagtcaagg gggtaattt tgaggcagtt ctgaggggtg 800
aggaagaaga ggccaattct aagcaaaata taacaaaacg agaagtggag 850
gatgacttgg gtcttagcat gctgattgac tcccagaaca accagtatat 900
tttgaccaag ccagagatt caaccatccc acgtgcagat caccacttta 950
taaaggacat tgttaccata ggaatgctgt ccttgccttg tggctggcta 1000
tgtacagcca taggattgcc tacaatgttt ggttatatta tttgtggtgt 1050
acttctggga ccttcaggac taaatagtat taagtctatt gtgcaagtgg 1100
agacattagg agaatttggg gtgtttttta ctctttttct tgttggctta 1150
gaattttctc cagaaaagct aagaaagggtg tggaagattt cttacaagg 1200
gccgtgttac atgacactgt taatgattgc atttggcttg ctgtgggggc 1250
atctcttgcg gatcaaacc acgcagagcg tcttcatttc cacgtgtctg 1300
tccttgtcaa gcacaccct cgtgtccagg ttctcatgg gcagtgtctg 1350

taataaagat aatttatgat catggtaaaa aaaaaaa 2837

<210> 230

<211> 677

<212> PRT

<213> Homo Sapien

<400> 230

Met	Lys	Val	Leu	Gly	Arg	Ser	Phe	Phe	Trp	Val	Leu	Phe	Pro	Val
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Leu	Pro	Trp	Ala	Val	Gln	Ala	Val	Glu	His	Glu	Glu	Val	Ala	Gln
				20				25						30

Arg	Val	Ile	Lys	Leu	His	Arg	Gly	Arg	Gly	Val	Ala	Ala	Met	Gln
				35				40						45

Ser	Arg	Gln	Trp	Val	Arg	Asp	Ser	Cys	Arg	Lys	Leu	Ser	Gly	Leu
				50				55						60

Leu	Arg	Gln	Lys	Asn	Ala	Val	Leu	Asn	Lys	Leu	Lys	Thr	Ala	Ile
				65				70						75

Gly	Ala	Val	Glu	Lys	Asp	Val	Gly	Leu	Ser	Asp	Glu	Glu	Lys	Leu
				80				85						90

Phe	Gln	Val	His	Thr	Phe	Glu	Ile	Phe	Gln	Lys	Glu	Leu	Asn	Glu
				95				100						105

Ser	Glu	Asn	Ser	Val	Phe	Gln	Ala	Val	Tyr	Gly	Leu	Gln	Arg	Ala
				110				115						120

Leu	Gln	Gly	Asp	Tyr	Lys	Asp	Val	Val	Asn	Met	Lys	Glu	Ser	Ser
				125				130						135

Arg	Gln	Arg	Leu	Glu	Ala	Leu	Arg	Glu	Ala	Ala	Ile	Lys	Glu	Glu
				140				145						150

Thr	Glu	Tyr	Met	Glu	Leu	Leu	Ala	Ala	Glu	Lys	His	Gln	Val	Glu
				155				160						165

Ala	Leu	Lys	Asn	Met	Gln	His	Gln	Asn	Gln	Ser	Leu	Ser	Met	Leu
				170				175						180

Asp	Glu	Ile	Leu	Glu	Asp	Val	Arg	Lys	Ala	Ala	Asp	Arg	Leu	Glu
				185				190						195

Glu	Glu	Ile	Glu	Glu	His	Ala	Phe	Asp	Asp	Asn	Lys	Ser	Val	Lys
				200				205						210

Gly	Val	Asn	Phe	Glu	Ala	Val	Leu	Arg	Val	Glu	Glu	Glu	Glu	Ala
				215				220						225

Asn	Ser	Lys	Gln	Asn	Ile	Thr	Lys	Arg	Glu	Val	Glu	Asp	Asp	Leu
				230				235						240

Gly	Leu	Ser	Met	Leu	Ile	Asp	Ser	Gln	Asn	Asn	Gln	Tyr	Ile	Leu
				245				250						255

Thr	Lys	Pro	Arg	Asp	Ser	Thr	Ile	Pro	Arg	Ala	Asp	His	His	Phe	260	265	270
Ile	Lys	Asp	Ile	Val	Thr	Ile	Gly	Met	Leu	Ser	Leu	Pro	Cys	Gly	275	280	285
Trp	Leu	Cys	Thr	Ala	Ile	Gly	Leu	Pro	Thr	Met	Phe	Gly	Tyr	Ile	290	295	300
Ile	Cys	Gly	Val	Leu	Leu	Gly	Pro	Ser	Gly	Leu	Asn	Ser	Ile	Lys	305	310	315
Ser	Ile	Val	Gln	Val	Glu	Thr	Leu	Gly	Glu	Phe	Gly	Val	Phe	Phe	320	325	330
Thr	Leu	Phe	Leu	Val	Gly	Leu	Glu	Phe	Ser	Pro	Glu	Lys	Leu	Arg	335	340	345
Lys	Val	Trp	Lys	Ile	Ser	Leu	Gln	Gly	Pro	Cys	Tyr	Met	Thr	Leu	350	355	360
Leu	Met	Ile	Ala	Phe	Gly	Leu	Leu	Trp	Gly	His	Leu	Leu	Arg	Ile	365	370	375
Lys	Pro	Thr	Gln	Ser	Val	Phe	Ile	Ser	Thr	Cys	Leu	Ser	Leu	Ser	380	385	390
Ser	Thr	Pro	Leu	Val	Ser	Arg	Phe	Leu	Met	Gly	Ser	Ala	Arg	Gly	395	400	405
Asp	Lys	Glu	Gly	Asp	Ile	Asp	Tyr	Ser	Thr	Val	Leu	Leu	Gly	Met	410	415	420
Leu	Val	Thr	Gln	Asp	Val	Gln	Leu	Gly	Leu	Phe	Met	Ala	Val	Met	425	430	435
Pro	Thr	Leu	Ile	Gln	Ala	Gly	Ala	Ser	Ala	Ser	Ser	Ser	Ile	Val	440	445	450
Val	Glu	Val	Leu	Arg	Ile	Leu	Val	Leu	Ile	Gly	Gln	Ile	Leu	Phe	455	460	465
Ser	Leu	Ala	Ala	Val	Phe	Leu	Leu	Cys	Leu	Val	Ile	Lys	Lys	Tyr	470	475	480
Leu	Ile	Gly	Pro	Tyr	Tyr	Arg	Lys	Leu	His	Met	Glu	Ser	Lys	Gly	485	490	495
Asn	Lys	Glu	Ile	Leu	Ile	Leu	Gly	Ile	Ser	Ala	Phe	Ile	Phe	Leu	500	505	510
Met	Leu	Thr	Val	Thr	Glu	Leu	Leu	Asp	Val	Ser	Met	Glu	Leu	Gly	515	520	525
Cys	Phe	Leu	Ala	Gly	Ala	Leu	Val	Ser	Ser	Gln	Gly	Pro	Val	Val	530	535	540
Thr	Glu	Glu	Ile	Ala	Thr	Ser	Ile	Glu	Pro	Ile	Arg	Asp	Phe	Leu			

545	550	555
Ala Ile Val Phe Phe Ala Ser Ile Gly Leu His Val Phe Pro Thr		
560	565	570
Phe Val Ala Tyr Glu Leu Thr Val Leu Val Phe Leu Thr Leu Ser		
575	580	585
Val Val Val Met Lys Phe Leu Leu Ala Ala Leu Val Leu Ser Leu		
590	595	600
Ile Leu Pro Arg Ser Ser Gln Tyr Ile Lys Trp Ile Val Ser Ala		
605	610	615
Gly Leu Ala Gln Val Ser Glu Phe Ser Phe Val Leu Gly Ser Arg		
620	625	630
Ala Arg Arg Ala Gly Val Ile Ser Arg Glu Val Tyr Leu Leu Ile		
635	640	645
Leu Ser Val Thr Thr Leu Ser Leu Leu Leu Ala Pro Val Leu Trp		
650	655	660
Arg Ala Ala Ile Thr Arg Cys Val Pro Arg Pro Glu Arg Arg Ser		
665	670	675
Ser Leu		

<210> 231
 <211> 1058
 <212> DNA
 <213> Homo Sapien

<400> 231
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 ccaaaccaga gacgcgctga acagagagaa tcaggctcaa agcaagtgga 100
 agtgggcaga gattccacca ggactggtgc aaggcgcaga gccagccaga 150
 tttgagaaga aggcaaaaag atgctgggga gcagagctgt aatgctgctg 200
 ttgctgctgc cctggacagc tcagggcaga gctgtgcctg ggggcagcag 250
 ccctgcctgg actcagtgcc agcagctttc acagaagctc tgcacactgg 300
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 accaggtct gattttttat gagaagctgc taggatcgga tattttcaca 500
 ggggagcctt ctctgctccc tgatagccct gtgggccagc ttcattgctc 550
 cctactgggc ctacgccaac tcctgcagcc tgagggtcac cactgggaga 600

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ctcagcagat tccaagcctc agtcccagcc agccatggca gcgtctcctt 650
ctccgcttca aaatccttcg cagcctccag gcctttgtgg ctgtagccgc 700
ccgggtcttt gcccatggag cagcaaccct gagtccctaa aggcagcagc 750
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<210> 232

<211> 189

<212> PRT

<213> Homo Sapien

<400> 232

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Thr	Gln	Cys	Gln	Gln	Leu	Ser	Gln	Lys	Leu	Cys	Thr	Leu	Ala	Trp	
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Ser	Ala	His	Pro	Leu	Val	Gly	His	Met	Asp	Leu	Arg	Glu	Glu	Gly	
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Gly	Cys	Asp	Pro	Gln	Gly	Leu	Arg	Asp	Asn	Ser	Gln	Phe	Cys	Leu	
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Gln	Arg	Ile	His	Gln	Gly	Leu	Ile	Phe	Tyr	Glu	Lys	Leu	Leu	Gly	
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Ser	Asp	Ile	Phe	Thr	Gly	Glu	Pro	Ser	Leu	Leu	Pro	Asp	Ser	Pro	
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Val	Gly	Gln	Leu	His	Ala	Ser	Leu	Leu	Gly	Leu	Ser	Gln	Leu	Leu	
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Gln	Pro	Glu	Gly	His	His	Trp	Glu	Thr	Gln	Gln	Ile	Pro	Ser	Leu	
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Ala His Gly Ala Ala Thr Leu Ser Pro
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 <213> Homo Sapien

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<211> 1160

<212> PRT

<213> Homo Sapien

<400> 234

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Tyr	Tyr	Leu	Gly	Ile	Arg	Asp	Val	Gln	Trp	Asn	Tyr	Ala	Pro	Lys
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Gly	Arg	Asn	Val	Ile	Thr	Asn	Gln	Pro	Leu	Asp	Ser	Asp	Ile	Val
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Ala	Ser	Ser	Phe	Leu	Lys	Ser	Asp	Lys	Asn	Arg	Ile	Gly	Gly	Thr
				65					70					75
Tyr	Lys	Lys	Thr	Ile	Tyr	Lys	Glu	Tyr	Lys	Asp	Asp	Ser	Tyr	Thr
				80					85					90
Asp	Glu	Val	Ala	Gln	Pro	Ala	Trp	Leu	Gly	Phe	Leu	Gly	Pro	Val
				95					100					105
Leu	Gln	Ala	Glu	Val	Gly	Asp	Val	Ile	Leu	Ile	His	Leu	Lys	Asn
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Phe	Ala	Thr	Arg	Pro	Tyr	Thr	Ile	His	Pro	His	Gly	Val	Phe	Tyr
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Glu	Lys	Asp	Ser	Glu	Gly	Ser	Leu	Tyr	Pro	Asp	Gly	Ser	Ser	Gly
				140					145					150
Pro	Leu	Lys	Ala	Asp	Asp	Ser	Val	Pro	Pro	Gly	Gly	Ser	His	Ile
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Tyr	Asn	Trp	Thr	Ile	Pro	Glu	Gly	His	Ala	Pro	Thr	Asp	Ala	Asp
				170					175					180
Pro	Ala	Cys	Leu	Thr	Trp	Ile	Tyr	His	Ser	His	Val	Asp	Ala	Pro
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Pro	His	Ala	Gly	Pro 530	Thr	Ala	Gln	Asp	Pro 535	Ala	Cys	Leu	Thr	Trp 540
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Val	Met	Phe	Gln	Gly 665	Asn	Thr	Val	Gln	Leu 670	Gln	Gly	Met	Arg	Lys 675
Gly	Ala	Ala	Met	Leu 680	Phe	Pro	His	Thr	Phe 685	Val	Met	Ala	Ile	Met 690
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Ser	His	Arg	Glu	Ala 710	Gly	Met	Arg	Ala	Ile 715	Tyr	Asn	Val	Ser	Gln 720
Cys	Pro	Gly	His	Gln 725	Ala	Thr	Pro	Arg	Gln 730	Arg	Tyr	Gln	Ala	Ala 735
Arg	Ile	Tyr	Tyr	Ile 740	Met	Ala	Glu	Glu	Val 745	Glu	Trp	Asp	Tyr	Cys 750
Pro	Asp	Arg	Ser	Trp 755	Glu	Arg	Glu	Trp	His 760	Asn	Gln	Ser	Glu	Lys 765
Asp	Ser	Tyr	Gly	Tyr 770	Ile	Phe	Leu	Ser	Asn 775	Lys	Asp	Gly	Leu	Leu 780
Gly	Ser	Arg	Tyr	Lys	Lys	Ala	Val	Phe	Arg	Glu	Tyr	Thr	Asp	Gly

Glu Thr Glu Lys Val Pro Pro Arg Asp Ile Glu Glu Gly Asn Val	1085	1090	1095
Lys Met Leu Gly Met Gln Ile Pro Ile Lys Asn Val Glu Met Leu	1100	1105	1110
Ala Ser Val Leu Val Ala Ile Ser Val Thr Leu Leu Leu Val Val	1115	1120	1125
Leu Ala Leu Gly Gly Val Val Trp Tyr Gln His Arg Gln Arg Lys	1130	1135	1140
Leu Arg Arg Asn Arg Arg Ser Ile Leu Asp Asp Ser Phe Lys Leu	1145	1150	1155
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 <211> 3442
 <212> DNA
 <213> Homo Sapien

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<210> 236
 <211> 457
 <212> PRT
 <213> Homo Sapien

<400> 236
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 Pro Gly Arg Ser Ser Leu Asp Asp Ser Gly Glu Arg Asp Glu Lys
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Ser	Glu	Thr	Glu	Ser	Phe	Asp	Gly	Asn	Ser	Ser	Lys	Gly	Gly	Leu
				50					55					60
Gly	Lys	Glu	Glu	Ser	Gln	Asn	Glu	Lys	Gln	Thr	Lys	Lys	Ser	Leu
				65					70					75
Leu	Pro	Thr	Leu	Glu	Lys	Lys	Leu	Thr	Arg	Val	Pro	Ser	Lys	Ser
				80					85					90
Leu	Asp	Leu	Asn	Lys	Asn	Glu	Tyr	Leu	Ser	Leu	Asp	Lys	Ser	Ser
				95					100					105
Thr	Ser	Asp	Ser	Val	Asp	Glu	Glu	Asn	Val	Pro	Glu	Lys	Asp	Leu
				110					115					120
His	Gly	Arg	Leu	Phe	Ile	Asn	Arg	Ile	Phe	His	Ile	Ser	Ala	Asp
				125					130					135
Arg	Met	Phe	Glu	Leu	Leu	Phe	Thr	Ser	Ser	Arg	Phe	Met	Gln	Lys
				140					145					150
Phe	Ala	Ser	Ser	Arg	Asn	Ile	Ile	Asp	Val	Val	Ser	Thr	Pro	Trp
				155					160					165
Thr	Ala	Glu	Leu	Gly	Gly	Asp	Gln	Leu	Arg	Thr	Met	Thr	Tyr	Thr
				170					175					180
Ile	Val	Leu	Asn	Ser	Pro	Leu	Thr	Gly	Lys	Cys	Thr	Ala	Ala	Thr
				185					190					195
Glu	Lys	Gln	Thr	Leu	Tyr	Lys	Glu	Ser	Arg	Glu	Ala	Arg	Phe	Tyr
				200					205					210
Leu	Val	Asp	Ser	Glu	Val	Leu	Thr	His	Asp	Val	Pro	Tyr	His	Asp
				215					220					225
Tyr	Phe	Tyr	Thr	Val	Asn	Arg	Tyr	Cys	Ile	Ile	Arg	Ser	Ser	Lys
				230					235					240
Gln	Lys	Cys	Arg	Leu	Arg	Val	Ser	Thr	Asp	Leu	Lys	Tyr	Arg	Lys
				245					250					255
Gln	Pro	Trp	Gly	Leu	Val	Lys	Ser	Leu	Ile	Glu	Lys	Asn	Ser	Trp
				260					265					270
Ser	Ser	Leu	Glu	Asp	Tyr	Phe	Lys	Gln	Leu	Glu	Ser	Asp	Leu	Leu
				275					280					285
Ile	Glu	Glu	Ser	Val	Leu	Asn	Gln	Ala	Ile	Glu	Asp	Pro	Gly	Lys
				290					295					300
Leu	Thr	Gly	Leu	Arg	Arg	Arg	Arg	Arg	Thr	Phe	Asn	Arg	Thr	Ala
				305					310					315
Glu	Thr	Val	Pro	Lys	Leu	Ser	Ser	Gln	His	Ser	Ser	Gly	Asp	Val

320	325	330
Gly Leu Gly Ala Lys Gly Asp Ile Thr	Gly Lys Lys Lys Glu Met	
335	340	345
Glu Asn Tyr Asn Val Thr Leu Ile Val	Val Met Ser Ile Phe Val	
350	355	360
Leu Leu Leu Val Leu Leu Asn Val Thr	Leu Phe Leu Lys Leu Ser	
365	370	375
Lys Ile Glu His Ala Ala Gln Ser Phe	Tyr Arg Leu Arg Leu Gln	
380	385	390
Glu Glu Lys Ser Leu Asn Leu Ala Ser	Asp Met Val Ser Arg Ala	
395	400	405
Glu Thr Ile Gln Lys Asn Lys Asp Gln	Ala His Arg Leu Lys Gly	
410	415	420
Val Leu Arg Asp Ser Ile Val Met Leu	Glu Gln Leu Lys Ser Ser	
425	430	435
Leu Ile Met Leu Gln Lys Thr Phe Asp	Leu Leu Asn Lys Asn Lys	
440	445	450
Thr Gly Met Ala Val Glu Ser		
455		

<210> 237
 <211> 762
 <212> DNA
 <213> Homo Sapien

<400> 237
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 cctgacttca atgctgaaaa gttctcaggc ctctggtacg tggctctccat 150
 ggcattctgac tgcagggtct tcctgggcaa gaaggaccac ctgtccatgt 200
 ccaccagggc catcaggccc acagaggagg gcggcctcca cgtccacatg 250
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cgcccttccc aggtggagcc aaagcagcag gcgcctttgc ccctggagtc 650
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gctgcagcct ca 762

<210> 238
<211> 184
<212> PRT
<213> Homo Sapien

<400> 238
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Pro Thr Ala Gln Ala Glu Val Leu Leu Gln Pro Asp Phe Asn Ala
20 25 30
Glu Lys Phe Ser Gly Leu Trp Tyr Val Val Ser Met Ala Ser Asp
35 40 45
Cys Arg Val Phe Leu Gly Lys Lys Asp His Leu Ser Met Ser Thr
50 55 60
Arg Ala Ile Arg Pro Thr Glu Glu Gly Gly Leu His Val His Met
65 70 75
Glu Phe Pro Gly Ala Asp Gly Cys Asn Gln Val Asp Ala Glu Tyr
80 85 90
Leu Lys Val Gly Ser Glu Gly His Phe Arg Val Pro Ala Leu Gly
95 100 105
Tyr Leu Asp Val Arg Ile Val Asp Thr Asp Tyr Ser Ser Phe Ala
110 115 120
Val Leu Tyr Ile Tyr Lys Glu Leu Glu Gly Ala Leu Ser Thr Met
125 130 135
Val Gln Leu Tyr Ser Arg Thr Gln Asp Val Ser Pro Gln Ala Leu
140 145 150
Lys Ser Phe Gln Asp Phe Tyr Pro Thr Leu Gly Leu Pro Lys Asp
155 160 165
Met Met Val Met Leu Pro Gln Ser Asp Ala Cys Asn Pro Glu Ser
170 175 180
Lys Glu Ala Pro

<210> 239
<211> 1656
<212> DNA
<213> Homo Sapien

<400> 239

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gaggcgtgga tatggagctg gctgctgcca agtccggggc ccgcgccgct 150
gcctagcgcg tcctggggac tctgtgggga cgcgccccgc gccgcggctc 200
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<210> 240
<211> 189
<212> PRT
<213> Homo Sapien

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<400> 240
Met Ala Leu Leu Ser Arg Pro Ala Leu Thr Leu Leu Leu Leu Leu
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Met Ala Ala Val Val Arg Cys Gln Glu Gln Ala Gln Thr Thr Asp
          20          25          30

Trp Arg Ala Thr Leu Lys Thr Ile Arg Asn Gly Val His Lys Ile
          35          40          45

Asp Thr Tyr Leu Asn Ala Ala Leu Asp Leu Leu Gly Gly Glu Asp
          50          55          60

Gly Leu Cys Gln Tyr Lys Cys Ser Asp Gly Ser Lys Pro Phe Pro
          65          70          75

Arg Tyr Gly Tyr Lys Pro Ser Pro Pro Asn Gly Cys Gly Ser Pro
          80          85          90

Leu Phe Gly Val His Leu Asn Ile Gly Ile Pro Ser Leu Thr Lys
          95          100          105

Cys Cys Asn Gln His Asp Arg Cys Tyr Glu Thr Cys Gly Lys Ser
          110          115          120

Lys Asn Asp Cys Asp Glu Glu Phe Gln Tyr Cys Leu Ser Lys Ile
          125          130          135

Cys Arg Asp Val Gln Lys Thr Leu Gly Leu Thr Gln His Val Gln
          140          145          150

Ala Cys Glu Thr Thr Val Glu Leu Leu Phe Asp Ser Val Ile His
          155          160          165

Leu Gly Cys Lys Pro Tyr Leu Asp Ser Gln Arg Ala Ala Cys Arg
          170          175          180

Cys His Tyr Glu Glu Lys Thr Asp Leu
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<210> 241
<211> 1319
<212> DNA

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<213> Homo Sapien

<400> 241

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acggaagcgg cctagtcctc cggctccgac agctgggtgt ccaggccatg 200
gggcagccct gggcggtgg gagcacggac ggggcgcccg cgcagctgcc 250
tctcgtgctc accgcgctgt gggccgcggc cgtgggcctg gagctggctt 300
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taaagcactg acttgttaa 1319

<210> 242

<211> 284
 <212> PRT
 <213> Homo Sapien

<400> 242

Met	Gly	Gln	Pro	Trp	Ala	Ala	Gly	Ser	Thr	Asp	Gly	Ala	Pro	Ala	1	5	10	15
Gln	Leu	Pro	Leu	Val	Leu	Thr	Ala	Leu	Trp	Ala	Ala	Ala	Val	Gly	20	25	30	
Leu	Glu	Leu	Ala	Tyr	Val	Leu	Val	Leu	Gly	Pro	Gly	Pro	Pro	Pro	35	40	45	
Leu	Gly	Pro	Leu	Ala	Arg	Ala	Leu	Gln	Leu	Ala	Leu	Ala	Ala	Phe	50	55	60	
Gln	Leu	Leu	Asn	Leu	Leu	Gly	Asn	Val	Gly	Leu	Phe	Leu	Arg	Ser	65	70	75	
Asp	Pro	Ser	Ile	Arg	Gly	Val	Met	Leu	Ala	Gly	Arg	Gly	Leu	Gly	80	85	90	
Gln	Gly	Trp	Ala	Tyr	Cys	Tyr	Gln	Cys	Gln	Ser	Gln	Val	Pro	Pro	95	100	105	
Arg	Ser	Gly	His	Cys	Ser	Ala	Cys	Arg	Val	Cys	Ile	Leu	Arg	Arg	110	115	120	
Asp	His	His	Cys	Arg	Leu	Leu	Gly	Arg	Cys	Val	Gly	Phe	Gly	Asn	125	130	135	
Tyr	Arg	Pro	Phe	Leu	Cys	Leu	Leu	Leu	His	Ala	Ala	Gly	Val	Leu	140	145	150	
Leu	His	Val	Ser	Val	Leu	Leu	Gly	Pro	Ala	Leu	Ser	Ala	Leu	Leu	155	160	165	
Arg	Ala	His	Thr	Pro	Leu	His	Met	Ala	Ala	Leu	Leu	Leu	Leu	Pro	170	175	180	
Trp	Leu	Met	Leu	Leu	Thr	Gly	Arg	Val	Ser	Leu	Ala	Gln	Phe	Ala	185	190	195	
Leu	Ala	Phe	Val	Thr	Asp	Thr	Cys	Val	Ala	Gly	Ala	Leu	Leu	Cys	200	205	210	
Gly	Ala	Gly	Leu	Leu	Phe	His	Gly	Met	Leu	Leu	Leu	Arg	Gly	Gln	215	220	225	
Thr	Thr	Trp	Glu	Trp	Ala	Arg	Gly	Gln	His	Ser	Tyr	Asp	Leu	Gly	230	235	240	
Pro	Cys	His	Asn	Leu	Gln	Ala	Ala	Leu	Gly	Pro	Arg	Trp	Ala	Leu	245	250	255	
Val	Trp	Leu	Trp	Pro	Phe	Leu	Ala	Ser	Pro	Leu	Pro	Gly	Asp	Gly	260	265	270	

Ile Thr Phe Gln Thr Thr Ala Asp Val Gly His Thr Ala Ser
 275 280

<210> 243
 <211> 1837
 <212> DNA
 <213> Homo Sapien

<400> 243
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 tttctgaat ttctggctgg ctccaccctc cgcgttcac ttctcaaga 200
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 cccagactct ttcacataac aaataaaata gcagagttcc cttaaaaaaa 1800
 aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaa 1837

<210> 244
 <211> 246
 <212> PRT
 <213> Homo Sapien

<400> 244
 Met Gly Pro Gln His Leu Arg Leu Val Gln Leu Phe Cys Leu Leu
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 Gly Ala Ile Pro Thr Leu Pro Arg Ala Gly Ala Leu Leu Cys Tyr
 20 25 30
 Glu Ala Thr Ala Ser Arg Phe Arg Ala Val Ala Phe His Asn Trp
 35 40 45
 Lys Trp Leu Leu Met Arg Asn Met Val Cys Lys Leu Gln Glu Gly
 50 55 60
 Cys Glu Glu Thr Leu Val Phe Ile Glu Thr Gly Thr Ala Arg Gly
 65 70 75
 Val Val Gly Phe Lys Gly Cys Ser Ser Ser Ser Ser Tyr Pro Ala
 80 85 90
 Gln Ile Ser Tyr Leu Val Ser Pro Pro Gly Val Ser Ile Ala Ser
 95 100 105
 Tyr Ser Arg Val Cys Arg Ser Tyr Leu Cys Asn Asn Leu Thr Asn
 110 115 120
 Leu Glu Pro Phe Val Lys Leu Lys Ala Ser Thr Pro Lys Ser Ile
 125 130 135
 Thr Ser Ala Ser Cys Ser Cys Pro Thr Cys Val Gly Glu His Met

140	145	150
Lys Asp Cys Leu Pro Asn Phe Val Thr	Thr Asn Ser Cys Pro Leu	
155	160	165
Ala Ala Ser Thr Cys Tyr Ser Ser Thr	Leu Lys Phe Gln Ala Gly	
170	175	180
Phe Leu Asn Thr Thr Phe Leu Leu Met	Gly Cys Ala Arg Glu His	
185	190	195
Asn Gln Leu Leu Ala Asp Phe His His	Ile Gly Ser Ile Lys Val	
200	205	210
Thr Glu Val Leu Asn Ile Leu Glu Lys	Ser Gln Ile Val Gly Ala	
215	220	225
Ala Ser Ser Arg Gln Asp Pro Ala Trp	Gly Val Val Leu Gly Leu	
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Leu Phe Ala Phe Arg Asp		
245		

<210> 245

<211> 2594

<212> DNA

<213> Homo Sapien

<400> 245

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tccgctcatg gtgccgccac gacgccatcg cggggcagga aggccagggg 200
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<210> 246

<211> 523

<212> PRT

<213> Homo Sapien

<400> 246

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Gly	Ile	Ala	Leu	Glu	Asp	Leu	Arg	Arg	Ala	Leu	Lys	Thr	Arg	Leu	35	40	45	
Gln	Met	Val	Cys	Val	Phe	Val	Met	Asn	Arg	Met	Asn	Ser	Gln	Asn	50	55	60	
Ser	Gly	Phe	Thr	Gln	Arg	Arg	Arg	Met	Ala	Leu	Gly	Ile	Val	Ile	65	70	75	
Leu	Leu	Leu	Val	Asp	Val	Ile	Trp	Val	Ala	Ser	Ser	Glu	Leu	Thr	80	85	90	
Ser	Tyr	Val	Phe	Thr	Gln	Tyr	Asn	Lys	Pro	Phe	Phe	Ser	Thr	Phe	95	100	105	
Ala	Lys	Thr	Ser	Met	Phe	Val	Leu	Tyr	Leu	Leu	Gly	Phe	Ile	Ile	110	115	120	
Trp	Lys	Pro	Trp	Arg	Gln	Gln	Cys	Thr	Arg	Gly	Leu	Arg	Gly	Lys	125	130	135	
His	Ala	Ala	Phe	Phe	Ala	Asp	Ala	Glu	Gly	Tyr	Phe	Ala	Ala	Cys	140	145	150	
Thr	Thr	Asp	Thr	Thr	Met	Asn	Ser	Ser	Leu	Ser	Glu	Pro	Leu	Tyr	155	160	165	
Val	Pro	Val	Lys	Phe	His	Asp	Leu	Pro	Ser	Glu	Lys	Pro	Glu	Ser	170	175	180	

Thr Asn Ile Asp	Thr Glu Lys Thr Pro	Lys Lys Ser Arg Val Arg	185	190	195
Phe Ser Asn Ile	Met Glu Ile Arg Gln	Leu Pro Ser Ser His Ala	200	205	210
Leu Glu Ala Lys	Leu Ser Arg Met Ser	Tyr Pro Val Lys Glu Gln	215	220	225
Glu Ser Ile Leu	Lys Thr Val Gly Lys	Leu Thr Ala Thr Gln Val	230	235	240
Ala Lys Ile Ser	Phe Phe Phe Cys Phe	Val Trp Phe Leu Ala Asn	245	250	255
Leu Ser Tyr Gln	Glu Ala Leu Ser Asp	Thr Gln Val Ala Ile Val	260	265	270
Asn Ile Leu Ser	Ser Thr Ser Gly Leu	Phe Thr Leu Ile Leu Ala	275	280	285
Ala Val Phe Pro	Ser Asn Ser Gly Asp	Arg Phe Thr Leu Ser Lys	290	295	300
Leu Leu Ala Val	Ile Leu Ser Ile Gly	Gly Val Val Leu Val Asn	305	310	315
Leu Ala Gly Ser	Glu Lys Pro Ala Gly	Arg Asp Thr Val Gly Ser	320	325	330
Ile Trp Ser Leu	Ala Gly Ala Met Leu	Tyr Ala Val Tyr Ile Val	335	340	345
Met Ile Lys Arg	Lys Val Asp Arg Glu	Asp Lys Leu Asp Ile Pro	350	355	360
Met Phe Phe Gly	Phe Val Gly Leu Phe	Asn Leu Leu Leu Leu Trp	365	370	375
Pro Gly Phe Phe	Leu Leu His Tyr Thr	Gly Phe Glu Asp Phe Glu	380	385	390
Phe Pro Asn Lys	Val Val Leu Met Cys	Ile Ile Ile Asn Gly Leu	395	400	405
Ile Gly Thr Val	Leu Ser Glu Phe Leu	Trp Leu Trp Gly Cys Phe	410	415	420
Leu Thr Ser Ser	Leu Ile Gly Thr Leu	Ala Leu Ser Leu Thr Ile	425	430	435
Pro Leu Ser Ile	Ile Ala Asp Met Cys	Met Gln Lys Val Gln Phe	440	445	450
Ser Trp Leu Phe	Phe Ala Gly Ala Ile	Pro Val Phe Phe Ser Phe	455	460	465
Phe Ile Val Thr	Leu Leu Cys His Tyr	Asn Asn Trp Asp Pro Val			

470	475	480
Met Val Gly Ile Arg Arg Ile Phe Ala	Phe Ile Cys Arg Lys His	
485	490	495
Arg Ile Gln Arg Val Pro Glu Asp Ser	Glu Gln Cys Glu Ser Leu	
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Ile Ser Met His Ser Val Ser Gln Glu	Asp Gly Ala Ser	
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<210> 247
 <211> 1123
 <212> DNA
 <213> Homo Sapien

<400> 247
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aattaaatat aaattaactc ctc 1123

<210> 248

<211> 241

<212> PRT

<213> Homo Sapien

<400> 248

Met	Lys	Phe	Ile	Leu	Leu	Trp	Ala	Leu	Leu	Asn	Leu	Thr	Val	Ala
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Leu	Ala	Phe	Asn	Pro	Asp	Tyr	Thr	Val	Ser	Ser	Thr	Pro	Pro	Tyr
			20						25					30

Leu	Val	Tyr	Leu	Lys	Ser	Asp	Tyr	Leu	Pro	Cys	Ala	Gly	Val	Leu
			35						40					45

Ile	His	Pro	Leu	Trp	Val	Ile	Thr	Ala	Ala	His	Cys	Asn	Leu	Pro
			50						55					60

Lys	Leu	Arg	Val	Ile	Leu	Gly	Val	Thr	Ile	Pro	Ala	Asp	Ser	Asn
			65						70					75

Glu	Lys	His	Leu	Gln	Val	Ile	Gly	Tyr	Glu	Lys	Met	Ile	His	His
			80						85					90

Pro	His	Phe	Ser	Val	Thr	Ser	Ile	Asp	His	Asp	Ile	Met	Leu	Ile
			95						100					105

Lys	Leu	Lys	Thr	Glu	Ala	Glu	Leu	Asn	Asp	Tyr	Val	Lys	Leu	Ala
			110						115					120

Asn	Leu	Pro	Tyr	Gln	Thr	Ile	Ser	Glu	Asn	Thr	Met	Cys	Ser	Val
			125						130					135

Ser	Thr	Trp	Ser	Tyr	Asn	Val	Cys	Asp	Ile	Tyr	Lys	Glu	Pro	Asp
			140						145					150

Ser	Leu	Gln	Thr	Val	Asn	Ile	Ser	Val	Ile	Ser	Lys	Pro	Gln	Cys
			155						160					165

Arg	Asp	Ala	Tyr	Lys	Thr	Tyr	Asn	Ile	Thr	Glu	Asn	Met	Leu	Cys
			170						175					180

Val	Gly	Ile	Val	Pro	Gly	Arg	Arg	Gln	Pro	Cys	Lys	Glu	Val	Ser
			185						190					195

Ala	Ala	Pro	Ala	Ile	Cys	Asn	Gly	Met	Leu	Gln	Gly	Ile	Leu	Ser
			200						205					210

Phe	Ala	Asp	Gly	Cys	Val	Leu	Arg	Ala	Asp	Val	Gly	Ile	Tyr	Ala
			215						220					225

Lys	Ile	Phe	Tyr	Tyr	Ile	Pro	Trp	Ile	Glu	Asn	Val	Ile	Gln	Asn
			230						235					240

Asn

<210> 249
<211> 526
<212> DNA
<213> Homo Sapien

<400> 249
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tcgccttcat tgttaccgcc tgtgtgctct gctacctgtt catcagctct 200
aagccccaca caaagttgga cctgggcttg agcttacaga cagcaggccc 250
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aagtgcctaa agtgagccct ctccagcaga gttactcctg cttgaacccg 350
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tcattgcttc atggccacag tgaccaccag tgacattcca ggcagccctg 450
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ttcaataaat gtctccatac catcaa 526

<210> 250
<211> 134
<212> PRT
<213> Homo Sapien

<400> 250
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20 25 30
Tyr Leu Phe Ile Ser Ser Lys Pro His Thr Lys Leu Asp Leu Gly
35 40 45
Leu Ser Leu Gln Thr Ala Gly Pro Glu Glu Val Ser Pro Asp Cys
50 55 60
Gln Gly Val Asn Thr Gly Met Ala Ala Glu Val Pro Lys Val Ser
65 70 75
Pro Leu Gln Gln Ser Tyr Ser Cys Leu Asn Pro Gln Leu Glu Ser
80 85 90
Asn Glu Gly Gln Ala Val Asn Ser Lys Arg Leu Leu His His Cys
95 100 105

Phe Met Ala Thr Val Thr Thr Ser Asp Ile Pro Gly Ser Pro Glu
110 115 120

Glu Ala Ser Val Pro Asn Pro Asp Leu Cys Gly Pro Val Pro
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<210> 251

<211> 1714

<212> DNA

<213> Homo Sapien

<400> 251

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<210> 252

<211> 361

<212> PRT

<213> Homo Sapien

<400> 252

Met	Arg	Gly	Gln	Arg	Ser	Leu	Leu	Leu	Gly	Pro	Ala	Arg	Leu	Cys	1	5	10	15
Leu	Arg	Leu	Leu	Leu	Leu	Leu	Gly	Tyr	Arg	Arg	Arg	Cys	Pro	Pro	20	25	30	
Leu	Leu	Arg	Gly	Leu	Val	Gln	Arg	Trp	Arg	Tyr	Gly	Lys	Val	Cys	35	40	45	
Leu	Arg	Ser	Leu	Leu	Tyr	Asn	Ser	Phe	Gly	Gly	Ser	Asp	Thr	Ala	50	55	60	
Val	Asp	Ala	Ala	Phe	Glu	Pro	Val	Tyr	Trp	Leu	Val	Asp	Asn	Val	65	70	75	
Ile	Arg	Trp	Phe	Gly	Val	Val	Phe	Val	Val	Leu	Val	Ile	Val	Leu	80	85	90	
Thr	Gly	Ser	Ile	Val	Ala	Ile	Ala	Tyr	Leu	Cys	Val	Leu	Pro	Leu	95	100	105	
Ile	Leu	Arg	Thr	Tyr	Ser	Val	Pro	Arg	Leu	Cys	Trp	His	Phe	Phe	110	115	120	
Tyr	Ser	His	Trp	Asn	Leu	Ile	Leu	Ile	Val	Phe	His	Tyr	Tyr	Gln	125	130	135	
Ala	Ile	Thr	Thr	Pro	Pro	Gly	Tyr	Pro	Pro	Gln	Gly	Arg	Asn	Asp				

Ile	Ala	Thr	Val	Ser	Ile	Cys	Lys	Lys	Cys	Ile	Tyr	Pro	Lys	Pro
				155					160					165
Ala	Arg	Thr	His	His	Cys	Ser	Ile	Cys	Asn	Arg	Cys	Val	Leu	Lys
				170					175					180
Met	Asp	His	His	Cys	Pro	Trp	Leu	Asn	Asn	Cys	Val	Gly	His	Tyr
				185					190					195
Asn	His	Arg	Tyr	Phe	Phe	Ser	Phe	Cys	Phe	Phe	Met	Thr	Leu	Gly
				200					205					210
Cys	Val	Tyr	Cys	Ser	Tyr	Gly	Ser	Trp	Asp	Leu	Phe	Arg	Glu	Ala
				215					220					225
Tyr	Ala	Ala	Ile	Glu	Thr	Tyr	His	Gln	Thr	Pro	Pro	Pro	Thr	Phe
				230					235					240
Ser	Phe	Arg	Glu	Arg	Met	Thr	His	Lys	Ser	Leu	Val	Tyr	Leu	Trp
				245					250					255
Phe	Leu	Cys	Ser	Ser	Val	Ala	Leu	Ala	Leu	Gly	Ala	Leu	Thr	Val
				260					265					270
Trp	His	Ala	Val	Leu	Ile	Ser	Arg	Gly	Glu	Thr	Ser	Ile	Glu	Arg
				275					280					285
His	Ile	Asn	Lys	Lys	Glu	Arg	Arg	Arg	Leu	Gln	Ala	Lys	Gly	Arg
				290					295					300
Val	Phe	Arg	Asn	Pro	Tyr	Asn	Tyr	Gly	Cys	Leu	Asp	Asn	Trp	Lys
				305					310					315
Val	Phe	Leu	Gly	Val	Asp	Thr	Gly	Arg	His	Trp	Leu	Thr	Arg	Val
				320					325					330
Leu	Leu	Pro	Ser	Ser	His	Leu	Pro	His	Gly	Asn	Gly	Met	Ser	Trp
				335					340					345
Glu	Pro	Pro	Pro	Trp	Val	Thr	Ala	His	Ser	Ala	Ser	Val	Met	Ala
				350					355					360

Val

<210> 253

<211> 2016

<212> DNA

<213> Homo Sapien

<400> 253

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actttttcag gtatggggga gggccaggca ccatgaagcc agtgtgggtc 150

gccacccttc tgtggatgct actgctggtg cccaggctgg gggccgccc 200
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<210> 254

<211> 567

<212> PRT

<213> Homo Sapien

<400> 254

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Val	Pro	Arg	Leu	Gly	Ala	Ala	Arg	Lys	Gly	Ser	Pro	Glu	Glu	Ala
				20				25					30	
Ser	Phe	Tyr	Tyr	Gly	Thr	Phe	Pro	Leu	Gly	Phe	Ser	Trp	Gly	Val
				35				40					45	
Gly	Ser	Ser	Ala	Tyr	Gln	Thr	Glu	Gly	Ala	Trp	Asp	Gln	Asp	Gly
				50				55					60	
Lys	Gly	Pro	Ser	Ile	Trp	Asp	Val	Phe	Thr	His	Ser	Gly	Lys	Gly
				65				70					75	
Lys	Val	Leu	Gly	Asn	Glu	Thr	Ala	Asp	Val	Ala	Cys	Asp	Gly	Tyr
				80				85					90	
Tyr	Lys	Val	Gln	Glu	Asp	Ile	Ile	Leu	Leu	Arg	Glu	Leu	His	Val
				95				100					105	
Asn	His	Tyr	Arg	Phe	Ser	Leu	Ser	Trp	Pro	Arg	Leu	Leu	Pro	Thr
				110				115					120	
Gly	Ile	Arg	Ala	Glu	Gln	Val	Asn	Lys	Lys	Gly	Ile	Glu	Phe	Tyr
				125				130					135	
Ser	Asp	Leu	Ile	Asp	Ala	Leu	Leu	Ser	Ser	Asn	Ile	Thr	Pro	Ile
				140				145					150	
Val	Thr	Leu	His	His	Trp	Asp	Leu	Pro	Gln	Leu	Leu	Gln	Val	Lys
				155				160					165	
Tyr	Gly	Gly	Trp	Gln	Asn	Val	Ser	Met	Ala	Asn	Tyr	Phe	Arg	Asp

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Tyr	Ala	Asn	Leu	Cys	Phe	Glu	Ala	Phe	Gly	Asp	Arg	Val	Lys	His					
				185					190					195					
Trp	Ile	Thr	Phe	Ser	Asp	Pro	Arg	Ala	Met	Ala	Glu	Lys	Gly	Tyr					
				200					205					210					
Glu	Thr	Gly	His	His	Ala	Pro	Gly	Leu	Lys	Leu	Arg	Gly	Thr	Gly					
				215					220					225					
Leu	Tyr	Lys	Ala	Ala	His	His	Ile	Ile	Lys	Ala	His	Ala	Lys	Thr					
				230					235					240					
Trp	His	Ser	Tyr	Asn	Thr	Thr	Trp	Arg	Ser	Lys	Gln	Gln	Gly	Leu					
				245					250					255					
Val	Gly	Ile	Ser	Leu	Asn	Cys	Asp	Trp	Gly	Glu	Pro	Val	Asp	Ile					
				260					265					270					
Ser	Asn	Pro	Lys	Asp	Leu	Glu	Ala	Ala	Glu	Arg	Tyr	Leu	Gln	Phe					
				275					280					285					
Cys	Leu	Gly	Trp	Phe	Ala	Asn	Pro	Ile	Tyr	Ala	Gly	Asp	Tyr	Pro					
				290					295					300					
Gln	Val	Met	Lys	Asp	Tyr	Ile	Gly	Arg	Lys	Ser	Ala	Glu	Gln	Gly					
				305					310					315					
Leu	Glu	Met	Ser	Arg	Leu	Pro	Val	Phe	Ser	Leu	Gln	Glu	Lys	Ser					
				320					325					330					
Tyr	Ile	Lys	Gly	Thr	Ser	Asp	Phe	Leu	Gly	Leu	Gly	His	Phe	Thr					
				335					340					345					
Thr	Arg	Tyr	Ile	Thr	Glu	Arg	Asn	Tyr	Pro	Ser	Arg	Gln	Gly	Pro					
				350					355					360					
Ser	Tyr	Gln	Asn	Asp	Arg	Asp	Leu	Ile	Glu	Leu	Val	Asp	Pro	Asn					
				365					370					375					
Trp	Pro	Asp	Leu	Gly	Ser	Lys	Trp	Leu	Tyr	Ser	Val	Pro	Trp	Gly					
				380					385					390					
Phe	Arg	Arg	Leu	Leu	Asn	Phe	Ala	Gln	Thr	Gln	Tyr	Gly	Asp	Pro					
				395					400					405					
Pro	Ile	Tyr	Val	Met	Glu	Asn	Gly	Ala	Ser	Gln	Lys	Phe	His	Cys					
				410					415					420					
Thr	Gln	Leu	Cys	Asp	Glu	Trp	Arg	Ile	Gln	Tyr	Leu	Lys	Gly	Tyr					
				425					430					435					
Ile	Asn	Glu	Met	Leu	Lys	Ala	Ile	Lys	Asp	Gly	Ala	Asn	Ile	Lys					
				440					445					450					
Gly	Tyr	Thr	Ser	Trp	Ser	Leu	Leu	Asp	Lys	Phe	Glu	Trp	Glu	Lys					
				455					460					465					

Gly	Tyr	Ser	Asp	Arg	Tyr	Gly	Phe	Tyr	Tyr	Val	Glu	Phe	Asn	Asp
				470					475					480
Arg	Asn	Lys	Pro	Arg	Tyr	Pro	Lys	Ala	Ser	Val	Gln	Tyr	Tyr	Lys
				485					490					495
Lys	Ile	Ile	Ile	Ala	Asn	Gly	Phe	Pro	Asn	Pro	Arg	Glu	Val	Glu
				500					505					510
Ser	Trp	Tyr	Leu	Lys	Ala	Leu	Glu	Thr	Cys	Ser	Ile	Asn	Asn	Gln
				515					520					525
Met	Leu	Ala	Ala	Glu	Pro	Leu	Leu	Ser	His	Met	Gln	Met	Val	Thr
				530					535					540
Glu	Ile	Val	Val	Pro	Thr	Val	Cys	Ser	Leu	Cys	Val	Leu	Ile	Thr
				545					550					555
Ala	Val	Leu	Leu	Met	Leu	Leu	Leu	Arg	Arg	Gln	Ser			
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<210> 255

<211> 1432

<212> DNA

<213> Homo Sapien

<400> 255

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gctggcctct caccctactg ctgaggtcac cattgtccag gtggatgtca 200
gcaacctgca gtcggtcttc cgggcctcca aggaacttaa gcaaagggtt 250
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<210> 256
 <211> 341
 <212> PRT
 <213> Homo Sapien

<400> 256
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 35 40 45
 Ala Ala Leu Leu Ala Ser His Pro Thr Ala Glu Val Thr Ile Val
 50 55 60
 Gln Val Asp Val Ser Asn Leu Gln Ser Val Phe Arg Ala Ser Lys
 65 70 75
 Glu Leu Lys Gln Arg Phe Gln Arg Leu Asp Cys Ile Tyr Leu Asn
 80 85 90
 Ala Gly Ile Met Pro Asn Pro Gln Leu Asn Ile Lys Ala Leu Phe
 95 100 105
 Phe Gly Leu Phe Ser Arg Lys Val Ile His Met Phe Ser Thr Ala
 110 115 120
 Glu Gly Leu Leu Thr Gln Gly Asp Lys Ile Thr Ala Asp Gly Leu
 125 130 135

Gln	Glu	Val	Phe	Glu	Thr	Asn	Val	Phe	Gly	His	Phe	Ile	Leu	Ile	140	145	150
Arg	Glu	Leu	Glu	Pro	Leu	Leu	Cys	His	Ser	Asp	Asn	Pro	Ser	Gln	155	160	165
Leu	Ile	Trp	Thr	Ser	Ser	Arg	Ser	Ala	Arg	Lys	Ser	Asn	Phe	Ser	170	175	180
Leu	Glu	Asp	Phe	Gln	His	Ser	Lys	Gly	Lys	Glu	Pro	Tyr	Ser	Ser	185	190	195
Ser	Lys	Tyr	Ala	Thr	Asp	Leu	Leu	Ser	Val	Ala	Leu	Asn	Arg	Asn	200	205	210
Phe	Asn	Gln	Gln	Gly	Leu	Tyr	Ser	Asn	Val	Ala	Cys	Pro	Gly	Thr	215	220	225
Ala	Leu	Thr	Asn	Leu	Thr	Tyr	Gly	Ile	Leu	Pro	Pro	Phe	Ile	Trp	230	235	240
Thr	Leu	Leu	Met	Pro	Ala	Ile	Leu	Leu	Leu	Arg	Phe	Phe	Ala	Asn	245	250	255
Ala	Phe	Thr	Leu	Thr	Pro	Tyr	Asn	Gly	Thr	Glu	Ala	Leu	Val	Trp	260	265	270
Leu	Phe	His	Gln	Lys	Pro	Glu	Ser	Leu	Asn	Pro	Leu	Ile	Lys	Tyr	275	280	285
Leu	Ser	Ala	Thr	Thr	Gly	Phe	Gly	Arg	Asn	Tyr	Ile	Met	Thr	Gln	290	295	300
Lys	Met	Asp	Leu	Asp	Glu	Asp	Thr	Ala	Glu	Lys	Phe	Tyr	Gln	Lys	305	310	315
Leu	Leu	Glu	Leu	Glu	Lys	His	Ile	Arg	Val	Thr	Ile	Gln	Lys	Thr	320	325	330
Asp	Asn	Gln	Ala	Arg	Leu	Ser	Gly	Ser	Cys	Leu					335	340	

<210> 257

<211> 1606

<212> DNA

<213> Homo Sapien

<400> 257

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gtgggcacca attccacact gcactatgtg tggagcagcc tggggcctct 250

<212> PRT

<213> Homo Sapien

<400> 258

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Pro	Ser	Pro	Leu	Leu	Leu	Trp	Thr	Leu	Leu	Leu	Phe	Ala	Ala	Pro	
				20					25					30	
Phe	Gly	Leu	Leu	Gly	Glu	Lys	Thr	Arg	Gln	Val	Ser	Leu	Glu	Val	
				35					40					45	
Ile	Pro	Asn	Trp	Leu	Gly	Pro	Leu	Gln	Asn	Leu	Leu	His	Ile	Arg	
				50					55					60	
Ala	Val	Gly	Thr	Asn	Ser	Thr	Leu	His	Tyr	Val	Trp	Ser	Ser	Leu	
				65					70					75	
Gly	Pro	Leu	Ala	Val	Val	Met	Val	Ala	Thr	Asn	Thr	Pro	His	Ser	
				80					85					90	
Thr	Leu	Ser	Ile	Asn	Trp	Ser	Leu	Leu	Leu	Ser	Pro	Glu	Pro	Asp	
				95					100					105	
Gly	Gly	Leu	Met	Val	Leu	Pro	Lys	Asp	Ser	Ile	Gln	Phe	Ser	Ser	
				110					115					120	
Ala	Leu	Val	Phe	Thr	Arg	Leu	Leu	Glu	Phe	Asp	Ser	Thr	Asn	Val	
				125					130					135	
Ser	Asp	Thr	Ala	Ala	Lys	Pro	Leu	Gly	Arg	Pro	Tyr	Pro	Pro	Tyr	
				140					145					150	
Ser	Leu	Ala	Asp	Phe	Ser	Trp	Asn	Asn	Ile	Thr	Asp	Ser	Leu	Asp	
				155					160					165	
Pro	Ala	Thr	Leu	Ser	Ala	Thr	Phe	Gln	Gly	His	Pro	Met	Asn	Asp	
				170					175					180	
Pro	Thr	Arg	Thr	Phe	Ala	Asn	Gly	Ser	Leu	Ala	Phe	Arg	Val	Gln	
				185					190					195	
Ala	Phe	Ser	Arg	Ser	Ser	Arg	Pro	Ala	Gln	Pro	Pro	Arg	Leu	Leu	
				200					205					210	
His	Thr	Ala	Asp	Thr	Cys	Gln	Leu	Glu	Val	Ala	Leu	Ile	Gly	Ala	
				215					220					225	
Ser	Pro	Arg	Gly	Asn	Arg	Ser	Leu	Phe	Gly	Leu	Glu	Val	Ala	Thr	
				230					235					240	
Leu	Gly	Gln	Gly	Pro	Asp	Cys	Pro	Ser	Met	Gln	Glu	Gln	His	Ser	
				245					250					255	
Ile	Asp	Asp	Glu	Tyr	Ala	Pro	Ala	Val	Phe	Gln	Leu	Asp	Gln	Leu	
				260					265					270	

Leu Trp Gly Ser Leu Pro Ser Gly Phe Ala Gln Trp Arg Pro Val
 275 280 285
 Ala Tyr Ser Gln Lys Pro Gly Gly Arg Glu Ser Ala Leu Pro Cys
 290 295 300
 Gln Ala Ser Pro Leu His Pro Ala Leu Ala Tyr Ser Leu Pro Gln
 305 310 315
 Ser Pro Ile Val Arg Ala Phe Phe Gly Ser Gln Asn Asn Phe Cys
 320 325 330
 Ala Phe Asn Leu Thr Phe Gly Ala Ser Thr Gly Pro Gly Tyr Trp
 335 340 345
 Asp Gln His Tyr Leu Ser Trp Ser Met Leu Leu Gly Val Gly Phe
 350 355 360
 Pro Pro Val Asp Gly Leu Ser Pro Leu Val Leu Gly Ile Met Ala
 365 370 375
 Val Ala Leu Gly Ala Pro Gly Leu Met Leu Leu Gly Gly Gly Leu
 380 385 390
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 395 400 405

Asn

<210> 259

<211> 2024

<212> DNA

<213> Homo Sapien

<400> 259

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<210> 260

<211> 420

<212> PRT

<213> Homo Sapien

<400> 260

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Arg	Arg	Met	Lys	Leu	Leu	Leu	Gly	Ile	Ala	Leu	Leu	Ala	Tyr	Val
				20					25					30
Ala	Ser	Val	Trp	Gly	Asn	Phe	Val	Asn	Met	Arg	Ser	Ile	Gln	Glu
				35					40					45
Asn	Gly	Glu	Leu	Lys	Ile	Glu	Ser	Lys	Ile	Glu	Glu	Met	Val	Glu
				50					55					60
Pro	Leu	Arg	Glu	Lys	Ile	Arg	Asp	Leu	Glu	Lys	Ser	Phe	Thr	Gln
				65					70					75
Lys	Tyr	Pro	Pro	Val	Lys	Phe	Leu	Ser	Glu	Lys	Asp	Arg	Lys	Arg
				80					85					90
Ile	Leu	Ile	Thr	Gly	Gly	Ala	Gly	Phe	Val	Gly	Ser	His	Leu	Thr
				95					100					105
Asp	Lys	Leu	Met	Met	Asp	Gly	His	Glu	Val	Thr	Val	Val	Asp	Asn
				110					115					120
Phe	Phe	Thr	Gly	Arg	Lys	Arg	Asn	Val	Glu	His	Trp	Ile	Gly	His
				125					130					135
Glu	Asn	Phe	Glu	Leu	Ile	Asn	His	Asp	Val	Val	Glu	Pro	Leu	Tyr
				140					145					150
Ile	Glu	Val	Asp	Gln	Ile	Tyr	His	Leu	Ala	Ser	Pro	Ala	Ser	Pro
				155					160					165
Pro	Asn	Tyr	Met	Tyr	Asn	Pro	Ile	Lys	Thr	Leu	Lys	Thr	Asn	Thr
				170					175					180
Ile	Gly	Thr	Leu	Asn	Met	Leu	Gly	Leu	Ala	Lys	Arg	Val	Gly	Ala
				185					190					195
Arg	Leu	Leu	Leu	Ala	Ser	Thr	Ser	Glu	Val	Tyr	Gly	Asp	Pro	Glu
				200					205					210
Val	His	Pro	Gln	Ser	Glu	Asp	Tyr	Trp	Gly	His	Val	Asn	Pro	Ile
				215					220					225
Gly	Pro	Arg	Ala	Cys	Tyr	Asp	Glu	Gly	Lys	Arg	Val	Ala	Glu	Thr
				230					235					240
Met	Cys	Tyr	Ala	Tyr	Met	Lys	Gln	Glu	Gly	Val	Glu	Val	Arg	Val
				245					250					255

Ala	Arg	Ile	Phe	Asn	Thr	Phe	Gly	Pro	Arg	Met	His	Met	Asn	Asp
				260					265					270
Gly	Arg	Val	Val	Ser	Asn	Phe	Ile	Leu	Gln	Ala	Leu	Gln	Gly	Glu
				275					280					285
Pro	Leu	Thr	Val	Tyr	Gly	Ser	Gly	Ser	Gln	Thr	Arg	Ala	Phe	Gln
				290					295					300
Tyr	Val	Ser	Asp	Leu	Val	Asn	Gly	Leu	Val	Ala	Leu	Met	Asn	Ser
				305					310					315
Asn	Val	Ser	Ser	Pro	Val	Asn	Leu	Gly	Asn	Pro	Glu	Glu	His	Thr
				320					325					330
Ile	Leu	Glu	Phe	Ala	Gln	Leu	Ile	Lys	Asn	Leu	Val	Gly	Ser	Gly
				335					340					345
Ser	Glu	Ile	Gln	Phe	Leu	Ser	Glu	Ala	Gln	Asp	Asp	Pro	Gln	Lys
				350					355					360
Arg	Lys	Pro	Asp	Ile	Lys	Lys	Ala	Lys	Leu	Met	Leu	Gly	Trp	Glu
				365					370					375
Pro	Val	Val	Pro	Leu	Glu	Glu	Gly	Leu	Asn	Lys	Ala	Ile	His	Tyr
				380					385					390
Phe	Arg	Lys	Glu	Leu	Glu	Tyr	Gln	Ala	Asn	Asn	Gln	Tyr	Ile	Pro
				395					400					405
Lys	Pro	Lys	Pro	Ala	Arg	Ile	Lys	Lys	Gly	Arg	Thr	Arg	His	Ser
				410					415					420

<210> 261

<211> 882

<212> DNA

<213> Homo Sapien

<400> 261

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acatcttcca aaatcccatc catcactgac ccacacttta tagacaactg 200
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tgggcaaacc agtgcaaatt tgaacataat gactgtttgg ataaatcata 350
taaatagctat gcagcttttg aatatgttgg agaaaatata tggttagggtg 400
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acccaatttt atgattttga tagtctatca tgctccagag tctgtggcca 500

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<210> 262

<211> 242

<212> PRT

<213> Homo Sapien

<400> 262

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Cys	Leu	Val	Ala	Thr	Thr	Ser	Ser	Lys	Ile	Pro	Ser	Ile	Thr	Asp
				20					25					30
Pro	His	Phe	Ile	Asp	Asn	Cys	Ile	Glu	Ala	His	Asn	Glu	Trp	Arg
				35					40					45
Gly	Lys	Val	Asn	Pro	Pro	Ala	Ala	Asp	Met	Lys	Tyr	Met	Ile	Trp
				50					55					60
Asp	Lys	Gly	Leu	Ala	Lys	Met	Ala	Lys	Ala	Trp	Ala	Asn	Gln	Cys
				65					70					75
Lys	Phe	Glu	His	Asn	Asp	Cys	Leu	Asp	Lys	Ser	Tyr	Lys	Cys	Tyr
				80					85					90
Ala	Ala	Phe	Glu	Tyr	Val	Gly	Glu	Asn	Ile	Trp	Leu	Gly	Gly	Ile
				95					100					105
Lys	Ser	Phe	Thr	Pro	Arg	His	Ala	Ile	Thr	Ala	Trp	Tyr	Asn	Glu
				110					115					120
Thr	Gln	Phe	Tyr	Asp	Phe	Asp	Ser	Leu	Ser	Cys	Ser	Arg	Val	Cys
				125					130					135
Gly	His	Tyr	Thr	Gln	Leu	Val	Trp	Ala	Asn	Ser	Phe	Tyr	Val	Gly
				140					145					150
Cys	Ala	Val	Ala	Met	Cys	Pro	Asn	Leu	Gly	Gly	Ala	Ser	Thr	Ala
				155					160					165
Ile	Phe	Val	Cys	Asn	Tyr	Gly	Pro	Ala	Gly	Asn	Phe	Ala	Asn	Met
				170					175					180

Pro	Pro	Tyr	Ala	Arg	Gly	Glu	Ser	Cys	Ser	Leu	Cys	Ser	Lys	Glu
				185					190					195
Glu	Lys	Cys	Val	Lys	Asn	Leu	Cys	Arg	Thr	Pro	Gln	Leu	Ile	Ile
				200					205					210
Pro	Asn	Gln	Asn	Pro	Phe	Leu	Lys	Pro	Thr	Gly	Arg	Ala	Pro	Gln
				215					220					225
Gln	Thr	Ala	Phe	Asn	Pro	Phe	Ser	Leu	Gly	Phe	Leu	Leu	Leu	Arg
				230					235					240
Ile	Phe													

<210> 263
 <211> 1687
 <212> DNA
 <213> Homo Sapien

<220>
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 <222> 1447, 1489, 1593
 <223> unknown base

<400> 263
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 gggctgcctg tgggcaaaca tatctacctc tccaccgaa ttgatggcag 350
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 ggacaaactg ggctactcac aaaagatgcg attcacctac tgagcatcct 1000
 ccagcttccc tgggtgctgtt cgctgcagtt gttccccatc agtactcaag 1050
 cactataagc cttagattcc tttcctcaga gtttcagggtt ttttcagtta 1100
 catctagagc tgaaatctgg atagtaactg caggaacaat attcctgtag 1150
 ccatggaaga gggcaaggct cagtcactcc ttggatggcc tcctaaatct 1200
 ccccgtagga acaggtccag gagaggccca tggagcagtc tcttccatgg 1250
 agtaagaagg aaggagcat gtacgcttgg tccaagattg gctagttcct 1300
 tgatagcatc ttactctcac cttctttgtg tctgtgatga aaggaacagt 1350
 ctgtgcaatg ggttttactt aaacttcact gttcaaccta tgagcaaata 1400
 tgtatgtgtg agtataagtt gagcatagca tacttccaga ggtggtnnta 1450
 tggagatggc aagaaaggag gaaatgattt cttcagatnt caaaggagtc 1500
 tgaaatatca tatttctgtg tgtgtctctc tcagcccctg cccaggctag 1550
 agggaaacag ctactgataa tcgaaaactg ctgtttgtgg cangaacccc 1600
 tggctgtgca aataaatggg gctgaggccc ctgtgtgata ttgaaaaaaa 1650
 aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaga 1687

<210> 264
 <211> 305
 <212> PRT
 <213> Homo Sapien

<400> 264
 Met Gly Ile Gln Thr Ser Pro Val Leu Leu Ala Ser Leu Gly Val
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 Gly Leu Val Thr Leu Leu Gly Leu Ala Val Gly Ser Tyr Leu Val
 20 25 30
 Arg Arg Ser Arg Arg Pro Gln Val Thr Leu Leu Asp Pro Asn Glu
 35 40 45
 Lys Tyr Leu Leu Arg Leu Leu Asp Lys Thr Thr Val Ser His Asn
 50 55 60
 Thr Lys Arg Phe Arg Phe Ala Leu Pro Thr Ala His His Thr Leu
 65 70 75
 Gly Leu Pro Val Gly Lys His Ile Tyr Leu Ser Thr Arg Ile Asp

Arg	Arg	Tyr	Leu	Cys	Met	Asp	Phe	Arg	Gly	Asn	Ile	Phe	Gly	Ser	95	100	105
His	Tyr	Phe	Asp	Pro	Glu	Asn	Cys	Arg	Phe	Gln	His	Gln	Thr	Leu	110	115	120
Glu	Asn	Gly	Tyr	Asp	Val	Tyr	His	Ser	Pro	Gln	Tyr	His	Phe	Leu	125	130	135
Val	Ser	Leu	Gly	Arg	Ala	Lys	Arg	Ala	Phe	Leu	Pro	Gly	Met	Asn	140	145	150
Pro	Pro	Pro	Tyr	Ser	Gln	Phe	Leu	Ser	Arg	Arg	Asn	Glu	Ile	Pro	155	160	165
Leu	Ile	His	Phe	Asn	Thr	Pro	Ile	Pro	Arg	Arg	His	Thr	Arg	Ser	170	175	180
Ala	Glu	Asp	Asp	Ser	Glu	Arg	Asp	Pro	Leu	Asn	Val	Leu	Lys	Pro	185	190	195
Arg	Ala	Arg	Met	Thr	Pro	Ala	Pro	Ala	Ser	Cys	Ser	Gln	Glu	Leu	200	205	210
Pro	Ser	Ala	Glu	Asp	Asn	Ser	Pro	Met	Ala	Ser	Asp	Pro	Leu	Gly	215	220	225
Val	Val	Arg	Gly	Gly	Arg	Val	Asn	Thr	His	Ala	Gly	Gly	Thr	Gly	230	235	240
Pro	Glu	Gly	Cys	Arg	Pro	Phe	Ala	Lys	Phe	Ile					245	250	

<210> 267
 <211> 2290
 <212> DNA
 <213> Homo Sapien

<400> 267
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 acagtttcct ctggcggcat gtaaaggctc cacaaggag ttgggagttc 150
 aaatgaggct gctgcggacg gcctgaggat ggacccaag ccctggacct 200
 gccgagcgtg gcaactgaggc agcggtgac gctactgtga gggaaagaag 250
 gttgtgagca gcccgcagg acccctggcc agccctggcc ccagcctctg 300
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 caggctgcc cgctgacggc cagggtgaag catgtgagga gccgccccgg 450
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ccaccatttt gcaaggacca tgaggccact gtgcgtgaca tgctggtggc 550
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caagcgggcg ggcgagtccc aggacaagtg cacctacacc ttcattgtgc 700
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tgagctgctc aagcagaagc ggcagatcga gacgctgcag cagctggtgg 850
aggtggacgg cggcattgtg agcgaggtga agctgctgcg caaggagagc 900
cgcaacatga actcgcggggt cacgcagctc tacatgcagc tcctgcacga 950
gatcatccgc aagcgggaca acgcgttgga gctctcccag ctggagaaca 1000
ggatcctgaa ccagacagcc gacatgctgc agctggccag caagtacaag 1050
gacctggagc acaagtacca gcacctggcc aactggccc acaaccaatc 1100
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cccacctaca accgcatcat caaccagatc tctaccaacg agatccagag 1250
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aacttcttca ggaactggga gacgtacaag caagggtttg ggaacattga 1550
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ggctgggagg accgggatgc tggattctgt tttccgaagt cactgcagcg 2150
gatgatggaa ctgaatcgat acggtgtttt ctgtccctcc tactttcctt 2200
cacaccagac agcccctcat gtctccagga caggacagga ctacagacaa 2250
ctctttcttt aaataaatta agtctctaca ataaaaaaaa 2290

<210> 268
<211> 493
<212> PRT
<213> Homo Sapien

<400> 268
Met Arg Pro Leu Cys Val Thr Cys Trp Trp Leu Gly Leu Leu Ala
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Glu Glu Gly Ser Pro Arg Glu Phe Ile Tyr Leu Asn Arg Tyr Lys
35 40 45
Arg Ala Gly Glu Ser Gln Asp Lys Cys Thr Tyr Thr Phe Ile Val
50 55 60
Pro Gln Gln Arg Val Thr Gly Ala Ile Cys Val Asn Ser Lys Glu
65 70 75
Pro Glu Val Leu Leu Glu Asn Arg Val His Lys Gln Glu Leu Glu
80 85 90
Leu Leu Asn Asn Glu Leu Leu Lys Gln Lys Arg Gln Ile Glu Thr
95 100 105
Leu Gln Gln Leu Val Glu Val Asp Gly Gly Ile Val Ser Glu Val
110 115 120
Lys Leu Leu Arg Lys Glu Ser Arg Asn Met Asn Ser Arg Val Thr
125 130 135
Gln Leu Tyr Met Gln Leu Leu His Glu Ile Ile Arg Lys Arg Asp
140 145 150
Asn Ala Leu Glu Leu Ser Gln Leu Glu Asn Arg Ile Leu Asn Gln
155 160 165
Thr Ala Asp Met Leu Gln Leu Ala Ser Lys Tyr Lys Asp Leu Glu
170 175 180
His Lys Tyr Gln His Leu Ala Thr Leu Ala His Asn Gln Ser Glu
185 190 195

Ile	Ile	Ala	Gln	Leu 200	Glu	Glu	His	Cys	Gln 205	Arg	Val	Pro	Ser	Ala 210
Arg	Pro	Val	Pro	Gln 215	Pro	Pro	Pro	Ala	Ala 220	Pro	Pro	Arg	Val	Tyr 225
Gln	Pro	Pro	Thr	Tyr 230	Asn	Arg	Ile	Ile	Asn 235	Gln	Ile	Ser	Thr	Asn 240
Glu	Ile	Gln	Ser	Asp 245	Gln	Asn	Leu	Lys	Val 250	Leu	Pro	Pro	Pro	Leu 255
Pro	Thr	Met	Pro	Thr 260	Leu	Thr	Ser	Leu	Pro 265	Ser	Ser	Thr	Asp	Lys 270
Pro	Ser	Gly	Pro	Trp 275	Arg	Asp	Cys	Leu	Gln 280	Ala	Leu	Glu	Asp	Gly 285
His	Asp	Thr	Ser	Ser 290	Ile	Tyr	Leu	Val	Lys 295	Pro	Glu	Asn	Thr	Asn 300
Arg	Leu	Met	Gln	Val 305	Trp	Cys	Asp	Gln	Arg 310	His	Asp	Pro	Gly	Gly 315
Trp	Thr	Val	Ile	Gln 320	Arg	Arg	Leu	Asp	Gly 325	Ser	Val	Asn	Phe	Phe 330
Arg	Asn	Trp	Glu	Thr 335	Tyr	Lys	Gln	Gly	Phe 340	Gly	Asn	Ile	Asp	Gly 345
Glu	Tyr	Trp	Leu	Gly 350	Leu	Glu	Asn	Ile	Tyr 355	Trp	Leu	Thr	Asn	Gln 360
Gly	Asn	Tyr	Lys	Leu 365	Leu	Val	Thr	Met	Glu 370	Asp	Trp	Ser	Gly	Arg 375
Lys	Val	Phe	Ala	Glu 380	Tyr	Ala	Ser	Phe	Arg 385	Leu	Glu	Pro	Glu	Ser 390
Glu	Tyr	Tyr	Lys	Leu 395	Arg	Leu	Gly	Arg	Tyr 400	His	Gly	Asn	Ala	Gly 405
Asp	Ser	Phe	Thr	Trp 410	His	Asn	Gly	Lys	Gln 415	Phe	Thr	Thr	Leu	Asp 420
Arg	Asp	His	Asp	Val 425	Tyr	Thr	Gly	Asn	Cys 430	Ala	His	Tyr	Gln	Lys 435
Gly	Gly	Trp	Trp	Tyr 440	Asn	Ala	Cys	Ala	His 445	Ser	Asn	Leu	Asn	Gly 450
Val	Trp	Tyr	Arg	Gly 455	Gly	His	Tyr	Arg	Ser 460	Arg	Tyr	Gln	Asp	Gly 465
Val	Tyr	Trp	Ala	Glu 470	Phe	Arg	Gly	Gly	Ser 475	Tyr	Ser	Leu	Lys	Lys 480
Val	Val	Met	Met	Ile	Arg	Pro	Asn	Pro	Asn	Thr	Phe	His		

<210> 269
 <211> 1869
 <212> DNA
 <213> Homo Sapien

<400> 269
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 cgcacctgga accccaacgt ccccgagagt ccccgaaatcc ccgctcccag 150
 gctacctaag aggatgagcg gtgctccgac ggccggggca gccctgatgc 200
 tctgcgccgc caccgccgtg ctactgagcg ctcagggcgg acccgtgcag 250
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 tgtcagggaa ccgaggggtc caccgacctc ccgttagccc ctgagagccg 450
 ggtggaccct gaggtccttc acagcctgca gacacaactc aaggctcaga 500
 acagcaggat ccagcaactc ttccacaagg tggcccagca gcagcggcac 550
 ctggagaagc agcacctgcg aattcagcat ctgcaaagcc agtttggcct 600
 cctggaccac aagcacctag accatgaggt ggccaagcct gccgaagaa 650
 agaggctgcc cgagatggcc cagccagttg acccggtca caatgtcagc 700
 cgctgcacc ggctgcccag ggattgccag gagctgttcc aggttgggga 750
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 tggatgaactg caagatgacc tcagatggag gctggacagt aattcagagg 850
 cgccacgatg gctcagtgga cttcaaccgg ccctgggaag cctacaaggc 900
 ggggtttggg gatccccacg gcgagttctg gctgggtctg gagaaggatgc 950
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 gagagcggcc tcattggtgct ggtgctgttg tgtgtaggtc ccctggggac 1800
 acaagcaggc gccaatggtt tctgggcgga gctcacagag ttcttggaat 1850
 aaaagcaacc tcagaacac 1869

<210> 270

<211> 453

<212> PRT

<213> Homo Sapien

<400> 270

Met	Thr	Val	Ile	Arg	Phe	Phe	Pro	Ala	Ala	Ser	Ala	Thr	Lys	Arg
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Val	Leu	Pro	Pro	Val	Leu	Arg	Val	Ser	Ser	Pro	Arg	Thr	Trp	Asn
				20					25					30
Pro	Asn	Val	Pro	Glu	Ser	Pro	Arg	Ile	Pro	Ala	Pro	Arg	Leu	Pro
				35					40					45
Lys	Arg	Met	Ser	Gly	Ala	Pro	Thr	Ala	Gly	Ala	Ala	Leu	Met	Leu
				50					55					60
Cys	Ala	Ala	Thr	Ala	Val	Leu	Leu	Ser	Ala	Gln	Gly	Gly	Pro	Val
				65					70					75
Gln	Ser	Lys	Ser	Pro	Arg	Phe	Ala	Ser	Trp	Asp	Glu	Met	Asn	Val
				80					85					90
Leu	Ala	His	Gly	Leu	Leu	Gln	Leu	Gly	Gln	Gly	Leu	Arg	Glu	His
				95					100					105
Ala	Glu	Arg	Thr	Arg	Ser	Gln	Leu	Ser	Ala	Leu	Glu	Arg	Arg	Leu
				110					115					120
Ser	Ala	Cys	Gly	Ser	Ala	Cys	Gln	Gly	Thr	Glu	Gly	Ser	Thr	Asp
				125					130					135

Leu	Pro	Leu	Ala	Pro	Glu	Ser	Arg	Val	Asp	Pro	Glu	Val	Leu	His
				140					145					150
Ser	Leu	Gln	Thr	Gln	Leu	Lys	Ala	Gln	Asn	Ser	Arg	Ile	Gln	Gln
				155					160					165
Leu	Phe	His	Lys	Val	Ala	Gln	Gln	Gln	Arg	His	Leu	Glu	Lys	Gln
				170					175					180
His	Leu	Arg	Ile	Gln	His	Leu	Gln	Ser	Gln	Phe	Gly	Leu	Leu	Asp
				185					190					195
His	Lys	His	Leu	Asp	His	Glu	Val	Ala	Lys	Pro	Ala	Arg	Arg	Lys
				200					205					210
Arg	Leu	Pro	Glu	Met	Ala	Gln	Pro	Val	Asp	Pro	Ala	His	Asn	Val
				215					220					225
Ser	Arg	Leu	His	Arg	Leu	Pro	Arg	Asp	Cys	Gln	Glu	Leu	Phe	Gln
				230					235					240
Val	Gly	Glu	Arg	Gln	Ser	Gly	Leu	Phe	Glu	Ile	Gln	Pro	Gln	Gly
				245					250					255
Ser	Pro	Pro	Phe	Leu	Val	Asn	Cys	Lys	Met	Thr	Ser	Asp	Gly	Gly
				260					265					270
Trp	Thr	Val	Ile	Gln	Arg	Arg	His	Asp	Gly	Ser	Val	Asp	Phe	Asn
				275					280					285
Arg	Pro	Trp	Glu	Ala	Tyr	Lys	Ala	Gly	Phe	Gly	Asp	Pro	His	Gly
				290					295					300
Glu	Phe	Trp	Leu	Gly	Leu	Glu	Lys	Val	His	Ser	Ile	Thr	Gly	Asp
				305					310					315
Arg	Asn	Ser	Arg	Leu	Ala	Val	Gln	Leu	Arg	Asp	Trp	Asp	Gly	Asn
				320					325					330
Ala	Glu	Leu	Leu	Gln	Phe	Ser	Val	His	Leu	Gly	Gly	Glu	Asp	Thr
				335					340					345
Ala	Tyr	Ser	Leu	Gln	Leu	Thr	Ala	Pro	Val	Ala	Gly	Gln	Leu	Gly
				350					355					360
Ala	Thr	Thr	Val	Pro	Pro	Ser	Gly	Leu	Ser	Val	Pro	Phe	Ser	Thr
				365					370					375
Trp	Asp	Gln	Asp	His	Asp	Leu	Arg	Arg	Asp	Lys	Asn	Cys	Ala	Lys
				380					385					390
Ser	Leu	Ser	Gly	Gly	Trp	Trp	Phe	Gly	Thr	Cys	Ser	His	Ser	Asn
				395					400					405
Leu	Asn	Gly	Gln	Tyr	Phe	Arg	Ser	Ile	Pro	Gln	Gln	Arg	Gln	Lys
				410					415					420
Leu	Lys	Lys	Gly	Ile	Phe	Trp	Lys	Thr	Trp	Arg	Gly	Arg	Tyr	Tyr

425

430

435

Pro Leu Gln Ala Thr Thr Met Leu Ile Gln Pro Met Ala Ala Glu
440 445 450

Ala Ala Ser

<210> 271

<211> 1174

<212> DNA

<213> Homo Sapien

<400> 271

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ggaccaact ggggtccccg ccgctgctgc tgctgaccat ggccttggcc 150
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tcaatttgct agtttggtga tgatggaatt gacttaaatt gaactaaatt 350
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caagaacaac ttatgtccct gatgccaaaa atgcacctac tctttcctct 500
aactctggtg aggtcattct ggagtgcacat gatggactcc gcacagagct 550
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ttttaaaaga caagtgtaat agacatctaa aattccactc ctcatagagc 1100

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caaataaaagt tactcaaatc tgtg 1174

<210> 272

<211> 323

<212> PRT

<213> Homo Sapien

<400> 272

Met Ala Ala Pro Lys Gly Ser Leu Trp Val Arg Thr Gln Leu Gly
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Leu Pro Pro Leu Leu Leu Leu Thr Met Ala Leu Ala Gly Gly Ser
20 25 30

Gly Thr Ala Ser Ala Glu Ala Phe Asp Ser Val Leu Gly Asp Thr
35 40 45

Ala Ser Cys His Arg Ala Cys Gln Leu Thr Tyr Pro Leu His Thr
50 55 60

Tyr Pro Lys Glu Glu Glu Leu Tyr Ala Cys Gln Arg Gly Cys Arg
65 70 75

Leu Phe Ser Ile Cys Gln Phe Val Asp Asp Gly Ile Asp Leu Asn
80 85 90

Arg Thr Lys Leu Glu Cys Glu Ser Ala Cys Thr Glu Ala Tyr Ser
95 100 105

Gln Ser Asp Glu Gln Tyr Ala Cys His Leu Gly Cys Gln Asn Gln
110 115 120

Leu Pro Phe Ala Glu Leu Arg Gln Glu Gln Leu Met Ser Leu Met
125 130 135

Pro Lys Met His Leu Leu Phe Pro Leu Thr Leu Val Arg Ser Phe
140 145 150

Trp Ser Asp Met Met Asp Ser Ala Gln Ser Phe Ile Thr Ser Ser
155 160 165

Trp Thr Phe Tyr Leu Gln Ala Asp Asp Gly Lys Ile Val Ile Phe
170 175 180

Gln Ser Lys Pro Glu Ile Gln Tyr Ala Pro His Leu Glu Gln Glu
185 190 195

Pro Thr Asn Leu Arg Glu Ser Ser Leu Ser Lys Met Ser Tyr Leu
200 205 210

Gln Met Arg Asn Ser Gln Ala His Arg Asn Phe Leu Glu Asp Gly
215 220 225

Glu Ser Asp Gly Phe Leu Arg Cys Leu Ser Leu Asn Ser Gly Trp
230 235 240

Ile	Leu	Thr	Thr	Thr	Leu	Val	Leu	Ser	Val	Met	Val	Leu	Leu	Trp
				245					250					255
Ile	Cys	Cys	Ala	Thr	Val	Ala	Thr	Ala	Val	Glu	Gln	Tyr	Val	Pro
				260					265					270
Ser	Glu	Lys	Leu	Ser	Ile	Tyr	Gly	Asp	Leu	Glu	Phe	Met	Asn	Glu
				275					280					285
Gln	Lys	Leu	Asn	Arg	Tyr	Pro	Ala	Ser	Ser	Leu	Val	Val	Val	Arg
				290					295					300
Ser	Lys	Thr	Glu	Asp	His	Glu	Glu	Ala	Gly	Pro	Leu	Pro	Thr	Lys
				305					310					315
Val	Asn	Leu	Ala	His	Ser	Glu	Ile							
				320										

<210> 273

<211> 1200

<212> DNA

<213> Homo Sapien

<400> 273

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gtgagggacc agggcgccat gaccgaccag ctgagcaggc ggcagatccg 150
cgagtaccaa ctctacagca ggaccagtgg caagcacgtg caggtcaccg 200
ggcgctcgcat ctccgccacc gccgaggacg gcaacaagtt tgccaagctc 250
atagtggaga cggacacggt tggcagccgg gttcgcatca aaggggctga 300
gagtgagaag tacatctgta tgaacaagag gggcaagctc atcggaagc 350
ccagcgggaa gagcaaagac tgcgtgttca cggagatcgt gctggagaac 400
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<210> 274

<211> 205

<212> PRT

<213> Homo Sapien

<400> 274

Met	Gly	Ala	Ala	Arg	Leu	Leu	Pro	Asn	Leu	Thr	Leu	Cys	Leu	Gln
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Leu	Leu	Ile	Leu	Cys	Cys	Gln	Thr	Gln	Tyr	Val	Arg	Asp	Gln	Gly
				20					25					30
Ala	Met	Thr	Asp	Gln	Leu	Ser	Arg	Arg	Gln	Ile	Arg	Glu	Tyr	Gln
				35					40					45
Leu	Tyr	Ser	Arg	Thr	Ser	Gly	Lys	His	Val	Gln	Val	Thr	Gly	Arg
				50					55					60
Arg	Ile	Ser	Ala	Thr	Ala	Glu	Asp	Gly	Asn	Lys	Phe	Ala	Lys	Leu
				65					70					75
Ile	Val	Glu	Thr	Asp	Thr	Phe	Gly	Ser	Arg	Val	Arg	Ile	Lys	Gly
				80					85					90
Ala	Glu	Ser	Glu	Lys	Tyr	Ile	Cys	Met	Asn	Lys	Arg	Gly	Lys	Leu
				95					100					105
Ile	Gly	Lys	Pro	Ser	Gly	Lys	Ser	Lys	Asp	Cys	Val	Phe	Thr	Glu
				110					115					120
Ile	Val	Leu	Glu	Asn	Asn	Tyr	Thr	Ala	Phe	Gln	Asn	Ala	Arg	His
				125					130					135
Glu	Gly	Trp	Phe	Met	Ala	Phe	Thr	Arg	Gln	Gly	Arg	Pro	Arg	Gln
				140					145					150
Ala	Ser	Arg	Ser	Arg	Gln	Asn	Gln	Arg	Glu	Ala	His	Phe	Ile	Lys
				155					160					165
Arg	Leu	Tyr	Gln	Gly	Gln	Leu	Pro	Phe	Pro	Asn	His	Ala	Glu	Lys
				170					175					180
Gln	Lys	Gln	Phe	Glu	Phe	Val	Gly	Ser	Ala	Pro	Thr	Arg	Arg	Thr
				185					190					195

Lys Arg Thr Arg Arg Pro Gln Pro Leu Thr
200 205

<210> 275
<211> 715
<212> DNA
<213> Homo Sapien

<400> 275
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tctatatctg tgctagctcc aggtggagaa ggcactctgga ggggatccct 200
caagctcagc aagctgagac aggaaactcc ttccagctcc cacataaacg 250
tgagttttct gaggaaaatc cagcgcaaaa ccttccgaag gtggatgcct 300
caggggaaga ccgtctttgg ggtggacaga tgcccactga agagctttgg 350
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ccacagtgat ctctattttc tccctttgcc aagggttaat aactgttctt 650
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taaaaatgct ataaa 715

<210> 276
<211> 135
<212> PRT
<213> Homo Sapien

<400> 276
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Ala Ile Ser Glu Val Arg Ser Lys Glu Ser Val Arg Leu Cys Gly
20 25 30
Leu Glu Tyr Ile Arg Thr Val Ile Tyr Ile Cys Ala Ser Ser Arg
35 40 45
Trp Arg Arg His Leu Glu Gly Ile Pro Gln Ala Gln Gln Ala Glu
50 55 60
Thr Gly Asn Ser Phe Gln Leu Pro His Lys Arg Glu Phe Ser Glu

	65		70		75
Glu Asn Pro Ala Gln Asn Leu Pro Lys Val Asp Ala Ser Gly Glu					
	80		85		90
Asp Arg Leu Trp Gly Gly Gln Met Pro Thr Glu Glu Leu Trp Lys					
	95		100		105
Ser Lys Lys His Ser Val Met Ser Arg Gln Asp Leu Gln Thr Leu					
	110		115		120
Cys Cys Thr Asp Gly Cys Ser Met Thr Asp Leu Ser Ala Leu Cys					
	125		130		135

<210> 277
 <211> 3355
 <212> DNA
 <213> Homo Sapien

<400> 277
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 aaaaggaaaa agaagttcct tcttacagct tggattcaac ggtccaaaac 200
 aaaaatgcag ctgccattaa agtctcagat gaacaaactt ctacactgat 250
 ttttaaaatc aagaataagg gcagcaagtt tctggattca ctgaatcaac 300
 agacacaaaa agctggcaat atagcaacta tgaagagaaa agctactaat 350
 aaaattaacc caacgcatag aagacttttt tttctcttct aaaaacaact 400
 aagtaaagac ttaaatttaa acacatcatt ttacaacctc atttcaaaat 450
 gaagactttt acctggaccc taggtgtgct attcttccta ctagtggaca 500
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 gacagaaaat tagggagaaa cttctagttt tgccaataga aaatgttctt 2400

Thr	Gly	Pro	Ile	Cys	Val	Asn	Thr	Lys	Gly	Gln	Asp	Ala	Ser	Thr	65	70	75
Ile	Lys	Asp	Met	Ile	Thr	Arg	Met	Asp	Leu	Glu	Asn	Leu	Lys	Asp	80	85	90
Val	Leu	Ser	Arg	Gln	Lys	Arg	Glu	Ile	Asp	Val	Leu	Gln	Leu	Val	95	100	105
Val	Asp	Val	Asp	Gly	Asn	Ile	Val	Asn	Glu	Val	Lys	Leu	Leu	Arg	110	115	120
Lys	Glu	Ser	Arg	Asn	Met	Asn	Ser	Arg	Val	Thr	Gln	Leu	Tyr	Met	125	130	135
Gln	Leu	Leu	His	Glu	Ile	Ile	Arg	Lys	Arg	Asp	Asn	Ser	Leu	Glu	140	145	150
Leu	Ser	Gln	Leu	Glu	Asn	Lys	Ile	Leu	Asn	Val	Thr	Thr	Glu	Met	155	160	165
Leu	Lys	Met	Ala	Thr	Arg	Tyr	Arg	Glu	Leu	Glu	Val	Lys	Tyr	Ala	170	175	180
Ser	Leu	Thr	Asp	Leu	Val	Asn	Asn	Gln	Ser	Val	Met	Ile	Thr	Leu	185	190	195
Leu	Glu	Glu	Gln	Cys	Leu	Arg	Ile	Phe	Ser	Arg	Gln	Asp	Thr	His	200	205	210
Val	Ser	Pro	Pro	Leu	Val	Gln	Val	Val	Pro	Gln	His	Ile	Pro	Asn	215	220	225
Ser	Gln	Gln	Tyr	Thr	Pro	Gly	Leu	Leu	Gly	Gly	Asn	Glu	Ile	Gln	230	235	240
Arg	Asp	Pro	Gly	Tyr	Pro	Arg	Asp	Leu	Met	Pro	Pro	Pro	Asp	Leu	245	250	255
Ala	Thr	Ser	Pro	Thr	Lys	Ser	Pro	Phe	Lys	Ile	Pro	Pro	Val	Thr	260	265	270
Phe	Ile	Asn	Glu	Gly	Pro	Phe	Lys	Asp	Cys	Gln	Gln	Ala	Lys	Glu	275	280	285
Ala	Gly	His	Ser	Val	Ser	Gly	Ile	Tyr	Met	Ile	Lys	Pro	Glu	Asn	290	295	300
Ser	Asn	Gly	Pro	Met	Gln	Leu	Trp	Cys	Glu	Asn	Ser	Leu	Asp	Pro	305	310	315
Gly	Gly	Trp	Thr	Val	Ile	Gln	Lys	Arg	Thr	Asp	Gly	Ser	Val	Asn	320	325	330
Phe	Phe	Arg	Asn	Trp	Glu	Asn	Tyr	Lys	Lys	Gly	Phe	Gly	Asn	Ile	335	340	345
Asp	Gly	Glu	Tyr	Trp	Leu	Gly	Leu	Glu	Asn	Ile	Tyr	Met	Leu	Ser			

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<210> 280

<211> 245

<212> PRT

<213> Homo Sapien

<400> 280

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Ala	Arg	Glu	Arg	Glu	Lys	Ser	Asn	Ala	Cys	Lys	Cys	Val	Ser	Ser
				20					25					30
Pro	Ser	Lys	Gly	Lys	Thr	Ser	Cys	Asp	Lys	Asn	Lys	Leu	Asn	Val
				35					40					45
Phe	Ser	Arg	Val	Lys	Leu	Phe	Gly	Ser	Lys	Lys	Arg	Arg	Arg	Arg
				50					55					60
Arg	Pro	Glu	Pro	Gln	Leu	Lys	Gly	Ile	Val	Thr	Lys	Leu	Tyr	Ser
				65					70					75
Arg	Gln	Gly	Tyr	His	Leu	Gln	Leu	Gln	Ala	Asp	Gly	Thr	Ile	Asp
				80					85					90
Gly	Thr	Lys	Asp	Glu	Asp	Ser	Thr	Tyr	Thr	Leu	Phe	Asn	Leu	Ile
				95					100					105
Pro	Val	Gly	Leu	Arg	Val	Val	Ala	Ile	Gln	Gly	Val	Gln	Thr	Lys
				110					115					120
Leu	Tyr	Leu	Ala	Met	Asn	Ser	Glu	Gly	Tyr	Leu	Tyr	Thr	Ser	Glu
				125					130					135

Leu	Phe	Thr	Pro	Glu	Cys	Lys	Phe	Lys	Glu	Ser	Val	Phe	Glu	Asn	
				140					145					150	
Tyr	Tyr	Val	Thr	Tyr	Ser	Ser	Met	Ile	Tyr	Arg	Gln	Gln	Gln	Ser	
				155					160					165	
Gly	Arg	Gly	Trp	Tyr	Leu	Gly	Leu	Asn	Lys	Glu	Gly	Glu	Ile	Met	
				170					175					180	
Lys	Gly	Asn	His	Val	Lys	Lys	Asn	Lys	Pro	Ala	Ala	His	Phe	Leu	
				185					190					195	
Pro	Lys	Pro	Leu	Lys	Val	Ala	Met	Tyr	Lys	Glu	Pro	Ser	Leu	His	
				200					205					210	
Asp	Leu	Thr	Glu	Phe	Ser	Arg	Ser	Gly	Ser	Gly	Thr	Pro	Thr	Lys	
				215					220					225	
Ser	Arg	Ser	Val	Ser	Gly	Val	Leu	Asn	Gly	Gly	Lys	Ser	Met	Ser	
				230					235					240	
His	Asn	Glu	Ser	Thr											
				245											

<210> 281

<211> 1471

<212> DNA

<213> Homo Sapien

<400> 281

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<210> 282
 <211> 225
 <212> PRT
 <213> Homo Sapien

<400> 282
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 Arg Glu Pro Gly Gly Ser Arg Pro Val Ser Ala Gln Arg Arg Val
 20 25 30
 Cys Pro Arg Gly Thr Lys Ser Leu Cys Gln Lys Gln Leu Leu Ile
 35 40 45
 Leu Leu Ser Lys Val Arg Leu Cys Gly Gly Arg Pro Ala Arg Pro
 50 55 60
 Asp Arg Gly Pro Glu Pro Gln Leu Lys Gly Ile Val Thr Lys Leu
 65 70 75
 Phe Cys Arg Gln Gly Phe Tyr Leu Gln Ala Asn Pro Asp Gly Ser
 80 85 90
 Ile Gln Gly Thr Pro Glu Asp Thr Ser Ser Phe Thr His Phe Asn
 95 100 105

Leu	Ile	Pro	Val	Gly	Leu	Arg	Val	Val	Thr	Ile	Gln	Ser	Ala	Lys	110	115	120
Leu	Gly	His	Tyr	Met	Ala	Met	Asn	Ala	Glu	Gly	Leu	Leu	Tyr	Ser	125	130	135
Ser	Pro	His	Phe	Thr	Ala	Glu	Cys	Arg	Phe	Lys	Glu	Cys	Val	Phe	140	145	150
Glu	Asn	Tyr	Tyr	Val	Leu	Tyr	Ala	Ser	Ala	Leu	Tyr	Arg	Gln	Arg	155	160	165
Arg	Ser	Gly	Arg	Ala	Trp	Tyr	Leu	Gly	Leu	Asp	Lys	Glu	Gly	Gln	170	175	180
Val	Met	Lys	Gly	Asn	Arg	Val	Lys	Lys	Thr	Lys	Ala	Ala	Ala	His	185	190	195
Phe	Leu	Pro	Lys	Leu	Leu	Glu	Val	Ala	Met	Tyr	Gln	Glu	Pro	Ser	200	205	210
Leu	His	Ser	Val	Pro	Glu	Ala	Ser	Pro	Ser	Ser	Pro	Pro	Ala	Pro	215	220	225

<210> 283
 <211> 744
 <212> DNA
 <213> Homo Sapien

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<210> 284

<211> 247

<212> PRT

<213> Homo Sapien

<400> 284

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20 25 30

Ser Ser Pro Ser Lys Asn Arg Gly Leu Cys Asn Gly Asn Leu Val
35 40 45

Asp Ile Phe Ser Lys Val Arg Ile Phe Gly Leu Lys Lys Arg Arg
50 55 60

Leu Arg Arg Gln Asp Pro Gln Leu Lys Gly Ile Val Thr Arg Leu
65 70 75

Tyr Cys Arg Gln Gly Tyr Tyr Leu Gln Met His Pro Asp Gly Ala
80 85 90

Leu Asp Gly Thr Lys Asp Asp Ser Thr Asn Ser Thr Leu Phe Asn
95 100 105

Leu Ile Pro Val Gly Leu Arg Val Val Ala Ile Gln Gly Val Lys
110 115 120

Thr Gly Leu Tyr Ile Ala Met Asn Gly Glu Gly Tyr Leu Tyr Pro
125 130 135

Ser Glu Leu Phe Thr Pro Glu Cys Lys Phe Lys Glu Ser Val Phe
140 145 150

Glu Asn Tyr Tyr Val Ile Tyr Ser Ser Met Leu Tyr Arg Gln Gln
155 160 165

Glu Ser Gly Arg Ala Trp Phe Leu Gly Leu Asn Lys Glu Gly Gln
170 175 180

Ala Met Lys Gly Asn Arg Val Lys Lys Thr Lys Pro Ala Ala His
185 190 195

Phe Leu Pro Lys Pro Leu Glu Val Ala Met Tyr Arg Glu Pro Ser
200 205 210

Leu His Asp Val Gly Glu Thr Val Pro Lys Pro Gly Val Thr Pro
215 220 225

Ser Lys Ser Thr Ser Ala Ser Ala Ile Met Asn Gly Gly Lys Pro
230 235 240

Val Asn Lys Ser Lys Thr Thr
245

<210> 285
<211> 2849
<212> DNA
<213> Homo Sapien

<220>
<221> unsure
<222> 2715
<223> unknown base

<400> 285
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<210> 286

<211> 345

<212> PRT

<213> Homo Sapien

<400> 286

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Gln	Phe	Ser	Ser	Asn	Lys	Glu	Gln	Asn	Gly	Val	Gln	Asp	Pro	Gln	35	40	45	
His	Glu	Arg	Ile	Ile	Thr	Val	Ser	Thr	Asn	Gly	Ser	Ile	His	Ser	50	55	60	
Pro	Arg	Phe	Pro	His	Thr	Tyr	Pro	Arg	Asn	Thr	Val	Leu	Val	Trp	65	70	75	
Arg	Leu	Val	Ala	Val	Glu	Glu	Asn	Val	Trp	Ile	Gln	Leu	Thr	Phe	80	85	90	
Asp	Glu	Arg	Phe	Gly	Leu	Glu	Asp	Pro	Glu	Asp	Asp	Ile	Cys	Lys	95	100	105	
Tyr	Asp	Phe	Val	Glu	Val	Glu	Glu	Pro	Ser	Asp	Gly	Thr	Ile	Leu	110	115	120	
Gly	Arg	Trp	Cys	Gly	Ser	Gly	Thr	Val	Pro	Gly	Lys	Gln	Ile	Ser	125	130	135	
Lys	Gly	Asn	Gln	Ile	Arg	Ile	Arg	Phe	Val	Ser	Asp	Glu	Tyr	Phe	140	145	150	
Pro	Ser	Glu	Pro	Gly	Phe	Cys	Ile	His	Tyr	Asn	Ile	Val	Met	Pro	155	160	165	
Gln	Phe	Thr	Glu	Ala	Val	Ser	Pro	Ser	Val	Leu	Pro	Pro	Ser	Ala	170	175	180	
Leu	Pro	Leu	Asp	Leu	Leu	Asn	Asn	Ala	Ile	Thr	Ala	Phe	Ser	Thr	185	190	195	
Leu	Glu	Asp	Leu	Ile	Arg	Tyr	Leu	Glu	Pro	Glu	Arg	Trp	Gln	Leu	200	205	210	
Asp	Leu	Glu	Asp	Leu	Tyr	Arg	Pro	Thr	Trp	Gln	Leu	Leu	Gly	Lys	215	220	225	

Ala	Phe	Val	Phe	Gly	Arg	Lys	Ser	Arg	Val	Val	Asp	Leu	Asn	Leu
				230					235					240
Leu	Thr	Glu	Glu	Val	Arg	Leu	Tyr	Ser	Cys	Thr	Pro	Arg	Asn	Phe
				245					250					255
Ser	Val	Ser	Ile	Arg	Glu	Glu	Leu	Lys	Arg	Thr	Asp	Thr	Ile	Phe
				260					265					270
Trp	Pro	Gly	Cys	Leu	Leu	Val	Lys	Arg	Cys	Gly	Gly	Asn	Cys	Ala
				275					280					285
Cys	Cys	Leu	His	Asn	Cys	Asn	Glu	Cys	Gln	Cys	Val	Pro	Ser	Lys
				290					295					300
Val	Thr	Lys	Lys	Tyr	His	Glu	Val	Leu	Gln	Leu	Arg	Pro	Lys	Thr
				305					310					315
Gly	Val	Arg	Gly	Leu	His	Lys	Ser	Leu	Thr	Asp	Val	Ala	Leu	Glu
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His	His	Glu	Glu	Cys	Asp	Cys	Val	Cys	Arg	Gly	Ser	Thr	Gly	Gly
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 <211> 1496
 <212> DNA
 <213> Homo Sapien

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<210> 288

<211> 204

<212> PRT

<213> Homo Sapien

<400> 288

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  20             25             30

Lys Phe Arg Asn Glu Asp Tyr Thr Ile His Val Gln Leu Asn Asp
  35             40             45

Tyr Val Asp Ile Ile Cys Pro His Tyr Glu Asp His Ser Ala Asp
  50             55             60

Ala Ala Met Glu Gln Tyr Ile Leu Tyr Leu Val Glu His Glu Glu
  65             70             75

Tyr Gln Leu Cys Gln Pro Gln Ser Lys Asp Gln Val Arg Trp Gln
  80             85             90

Cys Asn Arg Pro Ser Ala Lys His Gly Pro Glu Lys Leu Ser Glu
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Lys Phe Gln Arg Phe Thr Pro Phe Thr Leu Gly Lys Glu Phe Lys
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 Glu Gly His Ser Tyr Tyr Tyr Ile Ser Lys Pro Ile His Gln His
 125 130 135
 Glu Asp Arg Cys Leu Arg Leu Lys Val Thr Val Ser Gly Lys Ile
 140 145 150
 Thr His Ser Pro Gln Ala His Asp Asn Pro Gln Glu Lys Arg Leu
 155 160 165
 Ala Ala Asp Asp Pro Glu Val Arg Val Leu His Ser Ile Gly His
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 Ser Ala Ala Pro Arg Leu Phe Pro Leu Ala Trp Thr Val Leu Leu
 185 190 195
 Leu Pro Leu Leu Leu Leu Gln Thr Pro
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<210> 289
 <211> 1838
 <212> DNA
 <213> Homo Sapien

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Glu	Arg	Thr	Ile	Arg	Asp	Asn	Phe	Gly	Gly	Gly	Asn	Thr	Ala	Trp	
				65					70					75	
Glu	Glu	Glu	Asn	Leu	Ser	Lys	Tyr	Lys	Asp	Ser	Glu	Thr	Arg	Leu	
				80					85					90	
Val	Glu	Val	Leu	Glu	Gly	Val	Cys	Ser	Lys	Ser	Asp	Phe	Glu	Cys	
				95					100					105	
His	Arg	Leu	Leu	Glu	Leu	Ser	Glu	Glu	Leu	Val	Glu	Ser	Trp	Trp	
				110					115					120	
Phe	His	Lys	Gln	Gln	Glu	Ala	Pro	Asp	Leu	Phe	Gln	Trp	Leu	Cys	
				125					130					135	
Ser	Asp	Ser	Leu	Lys	Leu	Cys	Cys	Pro	Ala	Gly	Thr	Phe	Gly	Pro	
				140					145					150	
Ser	Cys	Leu	Pro	Cys	Pro	Gly	Gly	Thr	Glu	Arg	Pro	Cys	Gly	Gly	
				155					160					165	
Tyr	Gly	Gln	Cys	Glu	Gly	Glu	Gly	Thr	Arg	Gly	Gly	Ser	Gly	His	
				170					175					180	
Cys	Asp	Cys	Gln	Ala	Gly	Tyr	Gly	Gly	Glu	Ala	Cys	Gly	Gln	Cys	
				185					190					195	
Gly	Leu	Gly	Tyr	Phe	Glu	Ala	Glu	Arg	Asn	Ala	Ser	His	Leu	Val	
				200					205					210	
Cys	Ser	Ala	Cys	Phe	Gly	Pro	Cys	Ala	Arg	Cys	Ser	Gly	Pro	Glu	
				215					220					225	
Glu	Ser	Asn	Cys	Leu	Gln	Cys	Lys	Lys	Gly	Trp	Ala	Leu	His	His	
				230					235					240	
Leu	Lys	Cys	Val	Asp	Ile	Asp	Glu	Cys	Gly	Thr	Glu	Gly	Ala	Asn	
				245					250					255	
Cys	Gly	Ala	Asp	Gln	Phe	Cys	Val	Asn	Thr	Glu	Gly	Ser	Tyr	Glu	
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Cys	Arg	Asp	Cys	Ala	Lys	Ala	Cys	Leu	Gly	Cys	Met	Gly	Ala	Gly	
				275					280					285	
Pro	Gly	Arg	Cys	Lys	Lys	Cys	Ser	Pro	Gly	Tyr	Gln	Gln	Val	Gly	
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Ser	Lys	Cys	Leu	Asp	Val	Asp	Glu	Cys	Glu	Thr	Glu	Val	Cys	Pro	
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Gly	Glu	Asn	Lys	Gln	Cys	Glu	Asn	Thr	Glu	Gly	Gly	Tyr	Arg	Cys	
				320					325					330	
Ile	Cys	Ala	Glu	Gly	Tyr	Lys	Gln	Met	Glu	Gly	Ile	Cys	Val	Lys	
				335					340					345	

Glu	Gln	Ile	Pro	Glu	Ser	Ala	Gly	Phe	Phe	Ser	Glu	Met	Thr	Glu
				350					355					360
Asp	Glu	Leu	Val	Val	Leu	Gln	Gln	Met	Phe	Phe	Gly	Ile	Ile	Ile
				365					370					375
Cys	Ala	Leu	Ala	Thr	Leu	Ala	Ala	Lys	Gly	Asp	Leu	Val	Phe	Thr
				380					385					390
Ala	Ile	Phe	Ile	Gly	Ala	Val	Ala	Ala	Met	Thr	Gly	Tyr	Trp	Leu
				395					400					405
Ser	Glu	Arg	Ser	Asp	Arg	Val	Leu	Glu	Gly	Phe	Ile	Lys	Gly	Arg
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<210> 291
 <211> 2447
 <212> DNA
 <213> Homo Sapien

<400> 291
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<210> 292

<211> 428

<212> PRT

<213> Homo Sapien

<400> 292

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				20					25					30	
Phe	Gln	Ile	Ala	Asp	Cys	Ala	Tyr	Arg	Asp	Leu	Glu	Ser	Val	Pro	
				35					40					45	
Pro	Gly	Phe	Pro	Ala	Asn	Val	Thr	Thr	Leu	Ser	Leu	Ser	Ala	Asn	
				50					55					60	
Arg	Leu	Pro	Gly	Leu	Pro	Glu	Gly	Ala	Phe	Arg	Glu	Val	Pro	Leu	
				65					70					75	
Leu	Gln	Ser	Leu	Trp	Leu	Ala	His	Asn	Glu	Ile	Arg	Thr	Val	Ala	
				80					85					90	
Ala	Gly	Ala	Leu	Ala	Ser	Leu	Ser	His	Leu	Lys	Ser	Leu	Asp	Leu	
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Ser	His	Asn	Leu	Ile	Ser	Asp	Phe	Ala	Trp	Ser	Asp	Leu	His	Asn	
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Leu	Ser	Ala	Leu	Gln	Leu	Leu	Lys	Met	Asp	Ser	Asn	Glu	Leu	Thr	
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Phe	Ile	Pro	Arg	Asp	Ala	Phe	Arg	Ser	Leu	Arg	Ala	Leu	Arg	Ser	
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Leu	Gln	Leu	Asn	His	Asn	Arg	Leu	His	Thr	Leu	Ala	Glu	Gly	Thr	
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Phe	Thr	Pro	Leu	Thr	Ala	Leu	Ser	His	Leu	Gln	Ile	Asn	Glu	Asn	
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Pro	Phe	Asp	Cys	Thr	Cys	Gly	Ile	Val	Trp	Leu	Lys	Thr	Trp	Ala	
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Leu	Thr	Thr	Ala	Val	Ser	Ile	Pro	Glu	Gln	Asp	Asn	Ile	Ala	Cys	
				200					205					210	
Thr	Ser	Pro	His	Val	Leu	Lys	Gly	Thr	Pro	Leu	Ser	Arg	Leu	Pro	
				215					220					225	
Pro	Leu	Pro	Cys	Ser	Ala	Pro	Ser	Val	Gln	Leu	Ser	Tyr	Gln	Pro	
				230					235					240	
Ser	Gln	Asp	Gly	Ala	Glu	Leu	Arg	Pro	Gly	Phe	Val	Leu	Ala	Leu	
				245					250					255	

His	Cys	Asp	Val	Asp	Gly	Gln	Pro	Ala	Pro	Gln	Leu	His	Trp	His
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Ile	Gln	Ile	Pro	Ser	Gly	Ile	Val	Glu	Ile	Thr	Ser	Pro	Asn	Val
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Gly	Thr	Asp	Gly	Arg	Ala	Leu	Pro	Gly	Thr	Pro	Val	Ala	Ser	Ser
				290					295					300
Gln	Pro	Arg	Phe	Gln	Ala	Phe	Ala	Asn	Gly	Ser	Leu	Leu	Ile	Pro
				305					310					315
Asp	Phe	Gly	Lys	Leu	Glu	Glu	Gly	Thr	Tyr	Ser	Cys	Leu	Ala	Thr
				320					325					330
Asn	Glu	Leu	Gly	Ser	Ala	Glu	Ser	Ser	Val	Asp	Val	Ala	Leu	Ala
				335					340					345
Thr	Pro	Gly	Glu	Gly	Gly	Glu	Asp	Thr	Leu	Gly	Arg	Arg	Phe	His
				350					355					360
Gly	Lys	Ala	Val	Glu	Gly	Lys	Gly	Cys	Tyr	Thr	Val	Asp	Asn	Glu
				365					370					375
Val	Gln	Pro	Ser	Gly	Pro	Glu	Asp	Asn	Val	Val	Ile	Ile	Tyr	Leu
				380					385					390
Ser	Arg	Ala	Gly	Asn	Pro	Glu	Ala	Ala	Val	Ala	Glu	Gly	Val	Pro
				395					400					405
Gly	Gln	Leu	Pro	Pro	Gly	Leu	Leu	Leu	Leu	Gly	Gln	Ser	Leu	Leu
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<210> 293
 <211> 3449
 <212> DNA
 <213> Homo Sapien

<400> 293
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<210> 294
 <211> 915
 <212> PRT
 <213> Homo Sapien

<400> 294
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 35 40 45
 Leu Leu Glu Ser Ser Cys Glu Asn Lys Arg Ala Asp Leu Val Phe
 50 55 60
 Ile Ile Asp Ser Ser Arg Ser Val Asn Thr His Asp Tyr Ala Lys
 65 70 75
 Val Lys Glu Phe Ile Val Asp Ile Leu Gln Phe Leu Asp Ile Gly
 80 85 90
 Pro Asp Val Thr Arg Val Gly Leu Leu Gln Tyr Gly Ser Thr Val
 95 100 105
 Lys Asn Glu Phe Ser Leu Lys Thr Phe Lys Arg Lys Ser Glu Val
 110 115 120
 Glu Arg Ala Val Lys Arg Met Arg His Leu Ser Thr Gly Thr Met
 125 130 135
 Thr Gly Leu Ala Ile Gln Tyr Ala Leu Asn Ile Ala Phe Ser Glu
 140 145 150
 Ala Glu Gly Ala Arg Pro Leu Arg Glu Asn Val Pro Arg Val Ile
 155 160 165
 Met Ile Val Thr Asp Gly Arg Pro Gln Asp Ser Val Ala Glu Val
 170 175 180
 Ala Ala Lys Ala Arg Asp Thr Gly Ile Leu Ile Phe Ala Ile Gly
 185 190 195
 Val Gly Gln Val Asp Phe Asn Thr Leu Lys Ser Ile Gly Ser Glu
 200 205 210
 Pro His Glu Asp His Val Phe Leu Val Ala Asn Phe Ser Gln Ile
 215 220 225
 Glu Thr Leu Thr Ser Val Phe Gln Lys Lys Leu Cys Thr Ala His

Lys	Asp	Val	Cys	Gln	Ala	Ile	Asp	His	Gly	Cys	Glu	His	Ile	Cys	
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Val	Asn	Ser	Asp	Asp	Ser	Tyr	Thr	Cys	Glu	Cys	Leu	Glu	Gly	Phe	
				545					550					555	
Arg	Leu	Ala	Glu	Asp	Gly	Lys	Arg	Cys	Arg	Arg	Lys	Asp	Val	Cys	
				560					565					570	
Lys	Ser	Thr	His	His	Gly	Cys	Glu	His	Ile	Cys	Val	Asn	Asn	Gly	
				575					580					585	
Asn	Ser	Tyr	Ile	Cys	Lys	Cys	Ser	Glu	Gly	Phe	Val	Leu	Ala	Glu	
				590					595					600	
Asp	Gly	Arg	Arg	Cys	Lys	Lys	Cys	Thr	Glu	Gly	Pro	Ile	Asp	Leu	
				605					610					615	
Val	Phe	Val	Ile	Asp	Gly	Ser	Lys	Ser	Leu	Gly	Glu	Glu	Asn	Phe	
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Glu	Val	Val	Lys	Gln	Phe	Val	Thr	Gly	Ile	Ile	Asp	Ser	Leu	Thr	
				635					640					645	
Ile	Ser	Pro	Lys	Ala	Ala	Arg	Val	Gly	Leu	Leu	Gln	Tyr	Ser	Thr	
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Gln	Val	His	Thr	Glu	Phe	Thr	Leu	Arg	Asn	Phe	Asn	Ser	Ala	Lys	
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Thr	Gln	Gly	Glu	Gly	Ala	Arg	Pro	Leu	Ser	Thr	Arg	Val	Pro	Arg	
				710					715					720	
Ala	Ala	Ile	Val	Phe	Thr	Asp	Gly	Arg	Ala	Gln	Asp	Asp	Val	Ser	
				725					730					735	
Glu	Trp	Ala	Ser	Lys	Ala	Lys	Ala	Asn	Gly	Ile	Thr	Met	Tyr	Ala	
				740					745					750	
Val	Gly	Val	Gly	Lys	Ala	Ile	Glu	Glu	Glu	Leu	Gln	Glu	Ile	Ala	
				755					760					765	
Ser	Glu	Pro	Thr	Asn	Lys	His	Leu	Phe	Tyr	Ala	Glu	Asp	Phe	Ser	
				770					775					780	
Thr	Met	Asp	Glu	Ile	Ser	Glu	Lys	Leu	Lys	Lys	Gly	Ile	Cys	Glu	
				785					790					795	
Ala	Leu	Glu	Asp	Ser	Asp	Gly	Arg	Gln	Asp	Ser	Pro	Ala	Gly	Glu	
				800					805					810	
Leu	Pro	Lys	Thr	Val	Gln	Gln	Pro	Thr	Glu	Ser	Glu	Pro	Val	Thr	

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830	835	840
His Arg Tyr Leu Phe Glu Glu Asp Asn Leu Leu Arg Ser Thr Gln		
845	850	855
Lys Leu Ser His Ser Thr Lys Pro Ser Gly Ser Pro Leu Glu Glu		
860	865	870
Lys His Asp Gln Cys Lys Cys Glu Asn Leu Ile Met Phe Gln Asn		
875	880	885
Leu Ala Asn Glu Glu Val Arg Lys Leu Thr Gln Arg Leu Glu Glu		
890	895	900
Met Thr Gln Arg Met Glu Ala Leu Glu Asn Arg Leu Arg Tyr Arg		
905	910	915

<210> 295

<211> 1364

<212> DNA

<213> Homo Sapien

<400> 295

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tggacaccgc aaagaagaac tttggcggcg ggaacacggc ttgggaggaa 250
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<210> 296

<211> 353

<212> PRT

<213> Homo Sapien

<400> 296

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Cys	His	Arg	Cys	Arg	Gly	Leu	Val	Asp	Lys	Phe	Asn	Gln	Gly	Met	35	40	45	
Val	Asp	Thr	Ala	Lys	Lys	Asn	Phe	Gly	Gly	Gly	Asn	Thr	Ala	Trp	50	55	60	
Glu	Glu	Lys	Thr	Leu	Ser	Lys	Tyr	Glu	Ser	Ser	Glu	Ile	Arg	Leu	65	70	75	
Leu	Glu	Ile	Leu	Glu	Gly	Leu	Cys	Glu	Ser	Ser	Asp	Phe	Glu	Cys	80	85	90	
Asn	Gln	Met	Leu	Glu	Ala	Gln	Glu	Glu	His	Leu	Glu	Ala	Trp	Trp	95	100	105	
Leu	Gln	Leu	Lys	Ser	Glu	Tyr	Pro	Asp	Leu	Phe	Glu	Trp	Phe	Cys	110	115	120	
Val	Lys	Thr	Leu	Lys	Val	Cys	Cys	Ser	Pro	Gly	Thr	Tyr	Gly	Pro	125	130	135	
Asp	Cys	Leu	Ala	Cys	Gln	Gly	Gly	Ser	Gln	Arg	Pro	Cys	Ser	Gly				

Asn Gly His Cys Ser Gly Asp Gly Ser Arg Gln Gly Asp Gly Ser	155	160	165
Cys Arg Cys His Met Gly Tyr Gln Gly Pro Leu Cys Thr Asp Cys	170	175	180
Met Asp Gly Tyr Phe Ser Ser Leu Arg Asn Glu Thr His Ser Ile	185	190	195
Cys Thr Ala Cys Asp Glu Ser Cys Lys Thr Cys Ser Gly Leu Thr	200	205	210
Asn Arg Asp Cys Gly Glu Cys Glu Val Gly Trp Val Leu Asp Glu	215	220	225
Gly Ala Cys Val Asp Val Asp Glu Cys Ala Ala Glu Pro Pro Pro	230	235	240
Cys Ser Ala Ala Gln Phe Cys Lys Asn Ala Asn Gly Ser Tyr Thr	245	250	255
Cys Glu Glu Cys Asp Ser Ser Cys Val Gly Cys Thr Gly Glu Gly	260	265	270
Pro Gly Asn Cys Lys Glu Cys Ile Ser Gly Tyr Ala Arg Glu His	275	280	285
Gly Gln Cys Ala Asp Val Asp Glu Cys Ser Leu Ala Glu Lys Thr	290	295	300
Cys Val Arg Lys Asn Glu Asn Cys Tyr Asn Thr Pro Gly Ser Tyr	305	310	315
Val Cys Val Cys Pro Asp Gly Phe Glu Glu Thr Glu Asp Ala Cys	320	325	330
Val Pro Pro Ala Glu Ala Glu Ala Thr Glu Gly Glu Ser Pro Thr	335	340	345
Gln Leu Pro Ser Arg Glu Asp Leu	350		

<210> 297

<211> 2639

<212> DNA

<213> Homo Sapien

<400> 297

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<210> 298
 <211> 708
 <212> PRT
 <213> Homo Sapien

<400> 298
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 35 40 45
 Ile Tyr Met Glu Ala Ser Thr Val Asp Cys Asn Asp Leu Gly Leu
 50 55 60

Ile	Ser	Cys	Leu	Ser	Pro	Glu	Met	Asn	Cys	Asp	Gly	Gly	His	Ser
				650					655					660
Tyr	Val	Arg	Asn	Tyr	Leu	Gln	Lys	Pro	Thr	Phe	Ala	Leu	Gly	Glu
				665					670					675
Leu	Tyr	Pro	Pro	Leu	Ile	Asn	Leu	Trp	Glu	Ala	Gly	Lys	Glu	Lys
				680					685					690
Ser	Thr	Ser	Leu	Lys	Val	Lys	Ala	Thr	Val	Ile	Gly	Leu	Pro	Thr
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Asn Met Ser

<210> 299
 <211> 1102
 <212> DNA
 <213> Homo Sapien

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 gactcctgcc ccagctgctg aagagacaat gaccaccagc ccggggactc 850
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 tcttctcatt acctctcatg caccatcgta gggatcatag ttctaattgt 950

gcttctgatt gtgtttgttt gaaagacttc actgtggaag aaattccttc 1000
 cttacctgaa aggttcaggt aggcgctggc tgagggcggg gggcgctgga 1050
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 gc 1102

<210> 300
 <211> 259
 <212> PRT
 <213> Homo Sapien

<400> 300
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 20 25 30
 Gln Glu Glu Val Pro Gln Gln Thr Val Ala Pro Gln Gln Gln Arg
 35 40 45
 His Ser Phe Lys Gly Glu Glu Cys Pro Ala Gly Ser His Arg Ser
 50 55 60
 Glu His Thr Gly Ala Cys Asn Pro Cys Thr Glu Gly Val Asp Tyr
 65 70 75
 Thr Asn Ala Ser Asn Asn Glu Pro Ser Cys Phe Pro Cys Thr Val
 80 85 90
 Cys Lys Ser Asp Gln Lys His Lys Ser Ser Cys Thr Met Thr Arg
 95 100 105
 Asp Thr Val Cys Gln Cys Lys Glu Gly Thr Phe Arg Asn Glu Asn
 110 115 120
 Ser Pro Glu Met Cys Arg Lys Cys Ser Arg Cys Pro Ser Gly Glu
 125 130 135
 Val Gln Val Ser Asn Cys Thr Ser Trp Asp Asp Ile Gln Cys Val
 140 145 150
 Glu Glu Phe Gly Ala Asn Ala Thr Val Glu Thr Pro Ala Ala Glu
 155 160 165
 Glu Thr Met Asn Thr Ser Pro Gly Thr Pro Ala Pro Ala Ala Glu
 170 175 180
 Glu Thr Met Asn Thr Ser Pro Gly Thr Pro Ala Pro Ala Ala Glu
 185 190 195
 Glu Thr Met Thr Thr Ser Pro Gly Thr Pro Ala Pro Ala Ala Glu
 200 205 210
 Glu Thr Met Thr Thr Ser Pro Gly Thr Pro Ala Pro Ala Ala Glu
 215 220 225

Glu	Thr	Met	Thr	Thr	Ser	Pro	Gly	Thr	Pro	Ala	Ser	Ser	His	Tyr
				230					235					240

Leu	Ser	Cys	Thr	Ile	Val	Gly	Ile	Ile	Val	Leu	Ile	Val	Leu	Leu
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Ile Val Phe Val

<210> 301

<211> 1576

<212> DNA

<213> Homo Sapien

<400> 301

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 atcctgacaa tgctcatgag agcccagaac aagaaggagc agaagggcac 1500
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<210> 302

<211> 421

<212> PRT

<213> Homo Sapien

<400> 302

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Tyr	Asp	Gln	Glu	Pro	Asp	Asp	Asp	Tyr	Gln	Thr	Gly	Phe	Pro	Phe	35	40	45	
Arg	Gln	Asn	Val	Asp	Tyr	Gly	Val	Pro	Phe	His	Gln	Tyr	Thr	Leu	50	55	60	
Gly	Cys	Val	Ser	Glu	Cys	Phe	Cys	Pro	Thr	Asn	Phe	Pro	Ser	Ser	65	70	75	
Met	Tyr	Cys	Asp	Asn	Arg	Lys	Leu	Lys	Thr	Ile	Pro	Asn	Ile	Pro	80	85	90	
Met	His	Ile	Gln	Gln	Leu	Tyr	Leu	Gln	Phe	Asn	Glu	Ile	Glu	Ala	95	100	105	
Val	Thr	Ala	Asn	Ser	Phe	Ile	Asn	Ala	Thr	His	Leu	Lys	Glu	Ile	110	115	120	
Asn	Leu	Ser	His	Asn	Lys	Ile	Lys	Ser	Gln	Lys	Ile	Asp	Tyr	Gly	125	130	135	
Val	Phe	Ala	Lys	Leu	Pro	Asn	Leu	Leu	Gln	Leu	His	Leu	Glu	His	140	145	150	
Asn	Asn	Leu	Glu	Glu	Phe	Pro	Phe	Pro	Leu	Pro	Lys	Ser	Leu	Glu	155	160	165	

Arg	Leu	Leu	Leu	Gly	Tyr	Asn	Glu	Ile	Ser	Lys	Leu	Gln	Thr	Asn	
				170					175					180	
Ala	Met	Asp	Gly	Leu	Val	Asn	Leu	Thr	Met	Leu	Asp	Leu	Cys	Tyr	
				185					190					195	
Asn	Tyr	Leu	His	Asp	Ser	Leu	Leu	Lys	Asp	Lys	Ile	Phe	Ala	Lys	
				200					205					210	
Met	Glu	Lys	Leu	Met	Gln	Leu	Asn	Leu	Cys	Ser	Asn	Arg	Leu	Glu	
				215					220					225	
Ser	Met	Pro	Pro	Gly	Leu	Pro	Ser	Ser	Leu	Met	Tyr	Leu	Ser	Leu	
				230					235					240	
Glu	Asn	Asn	Ser	Ile	Ser	Ser	Ile	Pro	Glu	Lys	Tyr	Phe	Asp	Lys	
				245					250					255	
Leu	Pro	Lys	Leu	His	Thr	Leu	Arg	Met	Ser	His	Asn	Lys	Leu	Gln	
				260					265					270	
Asp	Ile	Pro	Tyr	Asn	Ile	Phe	Asn	Leu	Pro	Asn	Ile	Val	Glu	Leu	
				275					280					285	
Ser	Val	Gly	His	Asn	Lys	Leu	Lys	Gln	Ala	Phe	Tyr	Ile	Pro	Arg	
				290					295					300	
Asn	Leu	Glu	His	Leu	Tyr	Leu	Gln	Asn	Asn	Glu	Ile	Glu	Lys	Met	
				305					310					315	
Asn	Leu	Thr	Val	Met	Cys	Pro	Ser	Ile	Asp	Pro	Leu	His	Tyr	His	
				320					325					330	
His	Leu	Thr	Tyr	Ile	Arg	Val	Asp	Gln	Asn	Lys	Leu	Lys	Glu	Pro	
				335					340					345	
Ile	Ser	Ser	Tyr	Ile	Phe	Phe	Cys	Phe	Pro	His	Ile	His	Thr	Ile	
				350					355					360	
Tyr	Tyr	Gly	Glu	Gln	Arg	Ser	Thr	Asn	Gly	Gln	Thr	Ile	Gln	Leu	
				365					370					375	
Lys	Thr	Gln	Val	Phe	Arg	Arg	Phe	Pro	Asp	Asp	Asp	Asp	Glu	Ser	
				380					385					390	
Glu	Asp	His	Asp	Asp	Pro	Asp	Asn	Ala	His	Glu	Ser	Pro	Glu	Gln	
				395					400					405	
Glu	Gly	Ala	Glu	Gly	His	Phe	Asp	Leu	His	Tyr	Tyr	Glu	Asn	Gln	
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Glu

<210> 303
 <211> 1305
 <212> DNA
 <213> Homo Sapien

<400> 303

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gggctcgtga ttatgctgac attccagcat gaatctggta gacctgtggt 200
taacccggtc cctctccatg tgtctcctcc taaaaagttt tggtcttatg 250
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aaaca 1305

<210> 304

<211> 259

<212> PRT

<213> Homo Sapien

<400> 304

Met	Asn	Leu	Val	Asp	Leu	Trp	Leu	Thr	Arg	Ser	Leu	Ser	Met	Cys
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Leu	Leu	Leu	Gln	Ser	Phe	Val	Leu	Met	Ile	Leu	Cys	Phe	His	Ser
			20						25					30
Ala	Ser	Met	Cys	Pro	Lys	Gly	Cys	Leu	Cys	Ser	Ser	Ser	Gly	Gly
			35						40					45
Leu	Asn	Val	Thr	Cys	Ser	Asn	Ala	Asn	Leu	Lys	Glu	Ile	Pro	Arg
			50						55					60
Asp	Leu	Pro	Pro	Glu	Thr	Val	Leu	Leu	Tyr	Leu	Asp	Ser	Asn	Gln
			65						70					75
Ile	Thr	Ser	Ile	Pro	Asn	Glu	Ile	Phe	Lys	Asp	Leu	His	Gln	Leu
			80						85					90
Arg	Val	Leu	Asn	Leu	Ser	Lys	Asn	Gly	Ile	Glu	Phe	Ile	Asp	Glu
			95						100					105
His	Ala	Phe	Lys	Gly	Val	Ala	Glu	Thr	Leu	Gln	Thr	Leu	Asp	Leu
			110						115					120
Ser	Asp	Asn	Arg	Ile	Gln	Ser	Val	His	Lys	Asn	Ala	Phe	Asn	Asn
			125						130					135
Leu	Lys	Ala	Arg	Ala	Arg	Ile	Ala	Asn	Asn	Pro	Trp	His	Cys	Asp
			140						145					150
Cys	Thr	Leu	Gln	Gln	Val	Leu	Arg	Ser	Met	Ala	Ser	Asn	His	Glu
			155						160					165
Thr	Ala	His	Asn	Val	Ile	Cys	Lys	Thr	Ser	Val	Leu	Asp	Glu	His
			170						175					180
Ala	Gly	Arg	Pro	Phe	Leu	Asn	Ala	Ala	Asn	Asp	Ala	Asp	Leu	Cys
			185						190					195
Asn	Leu	Pro	Lys	Lys	Thr	Thr	Asp	Tyr	Ala	Met	Leu	Val	Thr	Met
			200						205					210
Phe	Gly	Trp	Phe	Thr	Met	Val	Ile	Ser	Tyr	Val	Val	Tyr	Tyr	Val
			215						220					225
Arg	Gln	Asn	Gln	Glu	Asp	Ala	Arg	Arg	His	Leu	Glu	Tyr	Leu	Lys
			230						235					240
Ser	Leu	Pro	Ser	Arg	Gln	Lys	Lys	Ala	Asp	Glu	Pro	Asp	Asp	Ile
			245						250					255
Ser	Thr	Val	Val											

<210> 305

<211> 2822
<212> DNA
<213> Homo Sapien

<400> 305

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taacacagaa ggaagttatt attgtatgtg tgtacctggc ttcagatcca 300
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<210> 306

<211> 690

<212> PRT

<213> Homo Sapien

<400> 306

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Cys Ser Tyr Thr Gln Asn Cys Thr Lys Thr Pro Cys Leu Pro Asn
20 25 30

Ala Lys Cys Glu Ile Arg Asn Gly Ile Glu Ala Cys Tyr Cys Asn
35 40 45

Met Gly Phe Ser Gly Asn Gly Val Thr Ile Cys Glu Asp Asp Asn
50 55 60

Glu Cys Gly Asn Leu Thr Gln Ser Cys Gly Glu Asn Ala Asn Cys
65 70 75

Thr Asn Thr Glu Gly Ser Tyr Tyr Cys Met Cys Val Pro Gly Phe
80 85 90

Arg Ser Ser Ser Asn Gln Asp Arg Phe Ile Thr Asn Asp Gly Thr
95 100 105

Val Cys Ile Glu Asn Val Asn Ala Asn Cys His Leu Asp Asn Val
110 115 120

Cys Ile Ala Ala Asn Ile Asn Lys Thr Leu Thr Lys Ile Arg Ser
125 130 135

Ile Lys Glu Pro Val Ala Leu Leu Gln Glu Val Tyr Arg Asn Ser
140 145 150

Val Thr Asp Leu Ser Pro Thr Asp Ile Ile Thr Tyr Ile Glu Ile
155 160 165

Leu Ala Glu Ser Ser Ser Leu Leu Gly Tyr Lys Asn Asn Thr Ile
170 175 180

Ser Ala Lys Asp Thr Leu Ser Asn Ser Thr Leu Thr Glu Phe Val
185 190 195

Lys Thr Val Asn Asn Phe Val Gln Arg Asp Thr Phe Val Val Trp
200 205 210

Asp Lys Leu Ser Val Asn His Arg Arg Thr His Leu Thr Lys Leu
215 220 225

Met His Thr Val Glu Gln Ala Thr Leu Arg Ile Ser Gln Ser Phe
230 235 240

Gln Lys Thr Thr Glu Phe Asp Thr Asn Ser Thr Asp Ile Ala Leu
245 250 255

Lys	Val	Phe	Phe	Phe	Asp	Ser	Tyr	Asn	Met	Lys	His	Ile	His	Pro	260	265	270
His	Met	Asn	Met	Asp	Gly	Asp	Tyr	Ile	Asn	Ile	Phe	Pro	Lys	Arg	275	280	285
Lys	Ala	Ala	Tyr	Asp	Ser	Asn	Gly	Asn	Val	Ala	Val	Ala	Phe	Leu	290	295	300
Tyr	Tyr	Lys	Ser	Ile	Gly	Pro	Leu	Leu	Ser	Ser	Ser	Asp	Asn	Phe	305	310	315
Leu	Leu	Lys	Pro	Gln	Asn	Tyr	Asp	Asn	Ser	Glu	Glu	Glu	Glu	Arg	320	325	330
Val	Ile	Ser	Ser	Val	Ile	Ser	Val	Ser	Met	Ser	Ser	Asn	Pro	Pro	335	340	345
Thr	Leu	Tyr	Glu	Leu	Glu	Lys	Ile	Thr	Phe	Thr	Leu	Ser	His	Arg	350	355	360
Lys	Val	Thr	Asp	Arg	Tyr	Arg	Ser	Leu	Cys	Ala	Phe	Trp	Asn	Tyr	365	370	375
Ser	Pro	Asp	Thr	Met	Asn	Gly	Ser	Trp	Ser	Ser	Glu	Gly	Cys	Glu	380	385	390
Leu	Thr	Tyr	Ser	Asn	Glu	Thr	His	Thr	Ser	Cys	Arg	Cys	Asn	His	395	400	405
Leu	Thr	His	Phe	Ala	Ile	Leu	Met	Ser	Ser	Gly	Pro	Ser	Ile	Gly	410	415	420
Ile	Lys	Asp	Tyr	Asn	Ile	Leu	Thr	Arg	Ile	Thr	Gln	Leu	Gly	Ile	425	430	435
Ile	Ile	Ser	Leu	Ile	Cys	Leu	Ala	Ile	Cys	Ile	Phe	Thr	Phe	Trp	440	445	450
Phe	Phe	Ser	Glu	Ile	Gln	Ser	Thr	Arg	Thr	Thr	Ile	His	Lys	Asn	455	460	465
Leu	Cys	Cys	Ser	Leu	Phe	Leu	Ala	Glu	Leu	Val	Phe	Leu	Val	Gly	470	475	480
Ile	Asn	Thr	Asn	Thr	Asn	Lys	Leu	Phe	Cys	Ser	Ile	Ile	Ala	Gly	485	490	495
Leu	Leu	His	Tyr	Phe	Phe	Leu	Ala	Ala	Phe	Ala	Trp	Met	Cys	Ile	500	505	510
Glu	Gly	Ile	His	Leu	Tyr	Leu	Ile	Val	Val	Gly	Val	Ile	Tyr	Asn	515	520	525
Lys	Gly	Phe	Leu	His	Lys	Asn	Phe	Tyr	Ile	Phe	Gly	Tyr	Leu	Ser	530	535	540
Pro	Ala	Val	Val	Val	Gly	Phe	Ser	Ala	Ala	Leu	Gly	Tyr	Arg	Tyr			

	545		550		555
Tyr Gly Thr Thr	Lys Val Cys Trp Leu	Ser Thr Glu Asn Asn	Phe		
	560	565	570		
Ile Trp Ser Phe	Ile Gly Pro Ala Cys	Leu Ile Ile Leu Val	Asn		
	575	580	585		
Leu Leu Ala Phe	Gly Val Ile Ile Tyr	Lys Val Phe Arg His	Thr		
	590	595	600		
Ala Gly Leu Lys	Pro Glu Val Ser Cys	Phe Glu Asn Ile Arg	Ser		
	605	610	615		
Cys Ala Arg Gly	Ala Leu Ala Leu Leu	Phe Leu Leu Gly Thr	Thr		
	620	625	630		
Trp Ile Phe Gly	Val Leu His Val Val	His Ala Ser Val Val	Thr		
	635	640	645		
Ala Tyr Leu Phe	Thr Val Ser Asn Ala	Phe Gln Gly Met Phe	Ile		
	650	655	660		
Phe Leu Phe Leu	Cys Val Leu Ser Arg	Lys Ile Gln Glu Glu	Tyr		
	665	670	675		
Tyr Arg Leu Phe	Lys Asn Val Pro Cys	Cys Phe Gly Cys Leu	Arg		
	680	685	690		

<210> 307
 <211> 2033
 <212> DNA
 <213> Homo Sapien

<400> 307
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 agaagatatc ctgattgttt cagaggggaa aatggcacct tttacacatg 350
 atttcagaaa agcgcaacag agaatgccag ctattcctgt caatatccat 400
 tccatgaatt ttacctggca agctgcaggg caggcagaat acttctatga 450
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<210> 308
 <211> 379
 <212> PRT
 <213> Homo Sapien

<400> 308

Met	Ala	Arg	Arg	Ser	Ala	Phe	Pro	Ala	Ala	Ala	Leu	Trp	Leu	Trp	1	5	10	15
Ser	Ile	Leu	Leu	Cys	Leu	Leu	Ala	Leu	Arg	Ala	Glu	Ala	Gly	Pro	20	25	30	
Pro	Gln	Glu	Glu	Ser	Leu	Tyr	Leu	Trp	Ile	Asp	Ala	His	Gln	Ala	35	40	45	
Arg	Val	Leu	Ile	Gly	Phe	Glu	Glu	Asp	Ile	Leu	Ile	Val	Ser	Glu	50	55	60	
Gly	Lys	Met	Ala	Pro	Phe	Thr	His	Asp	Phe	Arg	Lys	Ala	Gln	Gln	65	70	75	
Arg	Met	Pro	Ala	Ile	Pro	Val	Asn	Ile	His	Ser	Met	Asn	Phe	Thr	80	85	90	
Trp	Gln	Ala	Ala	Gly	Gln	Ala	Glu	Tyr	Phe	Tyr	Glu	Phe	Leu	Ser	95	100	105	
Leu	Arg	Ser	Leu	Asp	Lys	Gly	Ile	Met	Ala	Asp	Pro	Thr	Val	Asn	110	115	120	
Val	Pro	Leu	Leu	Gly	Thr	Val	Pro	His	Lys	Ala	Ser	Val	Val	Gln	125	130	135	
Val	Gly	Phe	Pro	Cys	Leu	Gly	Lys	Gln	Asp	Gly	Val	Ala	Ala	Phe	140	145	150	
Glu	Val	Asp	Val	Ile	Val	Met	Asn	Ser	Glu	Gly	Asn	Thr	Ile	Leu	155	160	165	
Gln	Thr	Pro	Gln	Asn	Ala	Ile	Phe	Phe	Lys	Thr	Cys	Gln	Gln	Ala	170	175	180	
Glu	Cys	Pro	Gly	Gly	Cys	Arg	Asn	Gly	Gly	Phe	Cys	Asn	Glu	Arg	185	190	195	
Arg	Ile	Cys	Glu	Cys	Pro	Asp	Gly	Phe	His	Gly	Pro	His	Cys	Glu	200	205	210	
Lys	Ala	Leu	Cys	Thr	Pro	Arg	Cys	Met	Asn	Gly	Gly	Leu	Cys	Val	215	220	225	
Thr	Pro	Gly	Phe	Cys	Ile	Cys	Pro	Pro	Gly	Phe	Tyr	Gly	Val	Asn	230	235	240	
Cys	Asp	Lys	Ala	Asn	Cys	Ser	Thr	Thr	Cys	Phe	Asn	Gly	Gly	Thr	245	250	255	
Cys	Phe	Tyr	Pro	Gly	Lys	Cys	Ile	Cys	Pro	Pro	Gly	Leu	Glu	Gly				

260	265	270
Glu Gln Cys Glu Ile Ser Lys Cys Pro Gln Pro Cys Arg Asn Gly		
275	280	285
Gly Lys Cys Ile Gly Lys Ser Lys Cys Lys Cys Ser Lys Gly Tyr		
290	295	300
Gln Gly Asp Leu Cys Ser Lys Pro Val Cys Glu Pro Gly Cys Gly		
305	310	315
Ala His Gly Thr Cys His Glu Pro Asn Lys Cys Gln Cys Gln Glu		
320	325	330
Gly Trp His Gly Arg His Cys Asn Lys Arg Tyr Glu Ala Ser Leu		
335	340	345
Ile His Ala Leu Arg Pro Ala Gly Ala Gln Leu Arg Gln His Thr		
350	355	360
Pro Ser Leu Lys Lys Ala Glu Glu Arg Arg Asp Pro Pro Glu Ser		
365	370	375
Asn Tyr Ile Trp		

<210> 309
 <211> 1843
 <212> DNA
 <213> Homo Sapien

<220>
 <221> unsure
 <222> 1837
 <223> unknown base

<400> 309
 cccacgcgtc cggctctcgct cgctcgcgca gcggcggcag cagaggtcgc 50
 gcacagatgc gggtttagact ggcggggggga ggaggcggag gagggaagga 100
 agctgcatgc atgagaccca cagactcttg caagctggat gccctctgtg 150
 gatgaaagat gtatcatgga atgaaccga gcaatggaga tggatttcta 200
 gagcagcagc agcagcagca gcaacctcag tccccccaga gactcttggc 250
 cgtgatcctg tggtttcagc tggcgctgtg ctteggccct gcacagctca 300
 cgggcggggt cgatgacctt caagtgtgtg ctgaccccg g cattcccgag 350
 aatggottca ggacccccag cggagggggt ttctttgaag gctctgtagc 400
 ccgatttcac tgccaagacg gattcaagct gaaggcgct acaaagagac 450
 tgtgtttgaa gcattttaat ggaaccctag gctggatccc aagtataat 500
 tccatctgtg tgcaagaaga ttgccgtatc cctcaaatac aagatgctga 550



gattcataac aagacatata gacatggaga gaagctaatac atcacttgtc 600
atgaaggatt caagatccgg taccctgacc tacacaatat ggtttcatta 650
tgtcgcatg atggaacgtg gaataatctg cccatctgtc aaggctgcct 700
gagacctcta gcctcttcta atggctatgt aaacatctct gagctccaga 750
cctccttccc ggtggggact gtgatctcct atcgctgctt tcccggattt 800
aaacttgatg ggtctgcgta tcttgagtgc ttacaaaacc ttatctggtc 850
gtccagccca ccccggtgcc ttgctctgga agcccaagtc tgtccactac 900
ctccaatggt gagtcacgga gatttcgtct gccaccgcg gccttgtagag 950
cgctacaacc acggaactgt ggtggagttt tactgcgac ctggctacag 1000
cctcaccagc gactacaagt acatcacctg ccagtatgga gagggtttc 1050
cttcttatca agtctactgc atcaaatcag agcaaactg gccagcacc 1100
catgagaccc tctgaccac gtggaagatt gtggcggtca cggcaaccag 1150
tgtgctgctg gtgctgctgc tcgtcatcct ggccaggatg ttccagacca 1200
agttcaaggc ccactttccc cccagggggc cccccggag ttccagcagt 1250
gaccctgact ttgtggtggt agacggcgtg cccgtcatgc tccgctccta 1300
tgacgaagct gtgagtggcg gcttgagtgc cttaggcccc gggtacatgg 1350
cctctgtggg ccagggtgc cccttaccg tggacgacca gagccccca 1400
gcataccccg gctcagggga cacggacaca ggcccagggg agtcagaaac 1450
ctgtgacagc gtctcaggct cttctgagct gctccaaagt ctgtattcac 1500
ctcccagggt ccaagagagc acccaccctg cttcggacaa ccctgacata 1550
attgccagca cggcagagga ggtggcatcc accagcccag gcatccatca 1600
tgcccactgg gtgttgttcc taagaaaactg attgattaaa aaatttccca 1650
aagtgtcctg aagtgtctct tcaaatacat gttgatctgt ggagttgatt 1700
cctttccttc tcttggtttt agacaaatgt aaacaaagct ctgacctta 1750
aaattgctat gctgatagag tggtaggggc tggaagcttg atcaagtcct 1800
gtttcttctt gacacagact gattaataat taaaagnaaa aaa 1843

<210> 310

<211> 490

<212> PRT

<213> Homo Sapien

<400> 310

Met 1	Tyr	His	Gly	Met 5	Asn	Pro	Ser	Asn	Gly 10	Asp	Gly	Phe	Leu	Glu 15
Gln	Gln	Gln	Gln	Gln 20	Gln	Gln	Pro	Gln	Ser 25	Pro	Gln	Arg	Leu	Leu 30
Ala	Val	Ile	Leu	Trp 35	Phe	Gln	Leu	Ala	Leu 40	Cys	Phe	Gly	Pro	Ala 45
Gln	Leu	Thr	Gly	Gly 50	Phe	Asp	Asp	Leu	Gln 55	Val	Cys	Ala	Asp	Pro 60
Gly	Ile	Pro	Glu	Asn 65	Gly	Phe	Arg	Thr	Pro 70	Ser	Gly	Gly	Val	Phe 75
Phe	Glu	Gly	Ser	Val 80	Ala	Arg	Phe	His	Cys 85	Gln	Asp	Gly	Phe	Lys 90
Leu	Lys	Gly	Ala	Thr 95	Lys	Arg	Leu	Cys	Leu 100	Lys	His	Phe	Asn	Gly 105
Thr	Leu	Gly	Trp	Ile 110	Pro	Ser	Asp	Asn	Ser 115	Ile	Cys	Val	Gln	Glu 120
Asp	Cys	Arg	Ile	Pro 125	Gln	Ile	Glu	Asp	Ala 130	Glu	Ile	His	Asn	Lys 135
Thr	Tyr	Arg	His	Gly 140	Glu	Lys	Leu	Ile	Ile 145	Thr	Cys	His	Glu	Gly 150
Phe	Lys	Ile	Arg	Tyr 155	Pro	Asp	Leu	His	Asn 160	Met	Val	Ser	Leu	Cys 165
Arg	Asp	Asp	Gly	Thr 170	Trp	Asn	Asn	Leu	Pro 175	Ile	Cys	Gln	Gly	Cys 180
Leu	Arg	Pro	Leu	Ala 185	Ser	Ser	Asn	Gly	Tyr 190	Val	Asn	Ile	Ser	Glu 195
Leu	Gln	Thr	Ser	Phe 200	Pro	Val	Gly	Thr	Val 205	Ile	Ser	Tyr	Arg	Cys 210
Phe	Pro	Gly	Phe	Lys 215	Leu	Asp	Gly	Ser	Ala 220	Tyr	Leu	Glu	Cys	Leu 225
Gln	Asn	Leu	Ile	Trp 230	Ser	Ser	Ser	Pro	Pro 235	Arg	Cys	Leu	Ala	Leu 240
Glu	Ala	Gln	Val	Cys 245	Pro	Leu	Pro	Pro	Met 250	Val	Ser	His	Gly	Asp 255
Phe	Val	Cys	His	Pro 260	Arg	Pro	Cys	Glu	Arg 265	Tyr	Asn	His	Gly	Thr 270
Val	Val	Glu	Phe	Tyr 275	Cys	Asp	Pro	Gly	Tyr 280	Ser	Leu	Thr	Ser	Asp 285
Tyr	Lys	Tyr	Ile	Thr	Cys	Gln	Tyr	Gly	Glu	Trp	Phe	Pro	Ser	Tyr

	290		295		300
Gln Val Tyr Cys	Ile Lys Ser Glu Gln	Thr Trp Pro Ser Thr	His		
	305		310		315
Glu Thr Leu Leu	Thr Thr Trp Lys Ile	Val Ala Phe Thr Ala	Thr		
	320		325		330
Ser Val Leu Leu	Val Leu Leu Leu Val	Ile Leu Ala Arg Met	Phe		
	335		340		345
Gln Thr Lys Phe	Lys Ala His Phe Pro	Pro Arg Gly Pro Pro	Arg		
	350		355		360
Ser Ser Ser Ser	Asp Pro Asp Phe Val	Val Val Asp Gly Val	Pro		
	365		370		375
Val Met Leu Pro	Ser Tyr Asp Glu Ala	Val Ser Gly Gly Leu	Ser		
	380		385		390
Ala Leu Gly Pro	Gly Tyr Met Ala Ser	Val Gly Gln Gly Cys	Pro		
	395		400		405
Leu Pro Val Asp	Asp Gln Ser Pro Pro	Ala Tyr Pro Gly Ser	Gly		
	410		415		420
Asp Thr Asp Thr	Gly Pro Gly Glu Ser	Glu Thr Cys Asp Ser	Val		
	425		430		435
Ser Gly Ser Ser	Glu Leu Leu Gln Ser	Leu Tyr Ser Pro Pro	Arg		
	440		445		450
Cys Gln Glu Ser	Thr His Pro Ala Ser	Asp Asn Pro Asp Ile	Ile		
	455		460		465
Ala Ser Thr Ala	Glu Glu Val Ala Ser	Thr Ser Pro Gly Ile	His		
	470		475		480
His Ala His Trp	Val Leu Phe Leu Arg	Asn			
	485		490		

<210> 311
 <211> 1210
 <212> DNA
 <213> Homo Sapien

<400> 311
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 gcgcagggttg gacgctggcg aacaggggct ctgggcctgg cgctgctgct 100
 gctgctcggc ctcggactag gcctggaggc cgccgcgagc ccgctttcca 150
 ccccgacctc tgcccaggcc gcaggcccca gctcaggctc gtgcccaccc 200
 accaagttcc agtgccgcac cagtggctta tgcgtgcccc tcacctggcg 250
 ctgcgacagg gacttggact gcagcgatgg cagcgatgag gaggagtgca 300

CCDS: CCDS000000.1

ggattgagcc atgtacccag aaagggcaat gccaccgcc cctggcctc 350
ccctgcccct gcaccggcgt cagtgactgc tctgggggaa ctgacaagaa 400
actgcgcaac tgcagccgcc tggcctgcct agcaggcgag ctccgttgca 450
cgctgagcga tgactgcatt ccactcacgt ggcgctgcga cggccacca 500
gactgtcccg actccagcga cgagctcggc tgtggaacca atgagatcct 550
cccgaaggg gatgccacaa ccatggggcc ccctgtgacc ctggagagtg 600
tcacctctct caggaatgcc acaaccatgg ggccccctgt gacctggag 650
agtgtcccct ctgtcgggaa tgccacatcc tcctctgccg gagaccagtc 700
tggaagccca actgcctatg gggttattgc agctgctgcg gtgctcagt 750
caagcctggg caccgccacc ctctccttt tgcctggct ccgagcccag 800
gagcgccctc gccactggg gttactggtg gccatgaagg agtcctgct 850
gctgtcagaa cagaagacct cgctgccctg aggacaagca cttgccacca 900
ccgtcactca gccctgggcg tagccggaca ggaggagagc agtgatgcgg 950
atgggtaccc gggcacacca gccctcagag acctgagttc ttctggccac 1000
gtggaacctc gaaccgcagc tcctgcagaa gtggccctgg agattgagg 1050
tccttgga caacctatgg agatccgggg agctaggatg gggaacctgc 1100
cacagccaga actgagggggc tggccccagg cagctcccag ggggtagaac 1150
ggccctgtgc ttaagacact ccctgctgcc ccgtctgagg gtggcgatta 1200
aagttgcttc 1210

<210> 312

<211> 282

<212> PRT

<213> Homo Sapien

<400> 312

Met	Ser	Gly	Gly	Trp	Met	Ala	Gln	Val	Gly	Ala	Trp	Arg	Thr	Gly
1				5					10					15
Ala	Leu	Gly	Leu	Ala	Leu	Leu	Leu	Leu	Leu	Gly	Leu	Gly	Leu	Gly
				20					25					30
Leu	Glu	Ala	Ala	Ala	Ser	Pro	Leu	Ser	Thr	Pro	Thr	Ser	Ala	Gln
				35					40					45
Ala	Ala	Gly	Pro	Ser	Ser	Gly	Ser	Cys	Pro	Pro	Thr	Lys	Phe	Gln
				50					55					60
Cys	Arg	Thr	Ser	Gly	Leu	Cys	Val	Pro	Leu	Thr	Trp	Arg	Cys	Asp
				65					70					75

Arg	Asp	Leu	Asp	Cys	Ser	Asp	Gly	Ser	Asp	Glu	Glu	Glu	Cys	Arg	80	85	90
Ile	Glu	Pro	Cys	Thr	Gln	Lys	Gly	Gln	Cys	Pro	Pro	Pro	Pro	Gly	95	100	105
Leu	Pro	Cys	Pro	Cys	Thr	Gly	Val	Ser	Asp	Cys	Ser	Gly	Gly	Thr	110	115	120
Asp	Lys	Lys	Leu	Arg	Asn	Cys	Ser	Arg	Leu	Ala	Cys	Leu	Ala	Gly	125	130	135
Glu	Leu	Arg	Cys	Thr	Leu	Ser	Asp	Asp	Cys	Ile	Pro	Leu	Thr	Trp	140	145	150
Arg	Cys	Asp	Gly	His	Pro	Asp	Cys	Pro	Asp	Ser	Ser	Asp	Glu	Leu	155	160	165
Gly	Cys	Gly	Thr	Asn	Glu	Ile	Leu	Pro	Glu	Gly	Asp	Ala	Thr	Thr	170	175	180
Met	Gly	Pro	Pro	Val	Thr	Leu	Glu	Ser	Val	Thr	Ser	Leu	Arg	Asn	185	190	195
Ala	Thr	Thr	Met	Gly	Pro	Pro	Val	Thr	Leu	Glu	Ser	Val	Pro	Ser	200	205	210
Val	Gly	Asn	Ala	Thr	Ser	Ser	Ser	Ala	Gly	Asp	Gln	Ser	Gly	Ser	215	220	225
Pro	Thr	Ala	Tyr	Gly	Val	Ile	Ala	Ala	Ala	Ala	Val	Leu	Ser	Ala	230	235	240
Ser	Leu	Val	Thr	Ala	Thr	Leu	Leu	Leu	Leu	Ser	Trp	Leu	Arg	Ala	245	250	255
Gln	Glu	Arg	Leu	Arg	Pro	Leu	Gly	Leu	Leu	Val	Ala	Met	Lys	Glu	260	265	270
Ser	Leu	Leu	Leu	Ser	Glu	Gln	Lys	Thr	Ser	Leu	Pro				275	280	

<210> 313
 <211> 2197
 <212> DNA
 <213> Homo Sapien

<400> 313
 cggacgcgtg ggcgtccggc ggtcgcagag ccaggaggcg gaggcgcgcg 50
 ggccagcctg ggccccagcc cacaccttca ccaggggcca ggagccacca 100
 tgtggcgatg tccactgggg ctactgctgt tgctgccgct ggctggccac 150
 ttggctctgg gtgcccagca gggtcgtggg cgccgggagc tagcaccggg 200
 tctgcacctg cggggcatcc gggacgcggg aggccggtac tgccaggagc 250

aggacctgtg ctgccgcggc cgtgccgacg actgtgccct gccctacctg 300
ggcgccatct gttactgtga cctcttctgc aaccgcacgg tctccgactg 350
ctgccctgac ttctgggact tctgcctcgg cgtgccaccc ccttttcccc 400
cgatccaagg atgtatgcat ggaggtcgta tctatccagt cttgggaacg 450
tactgggaca actgtaaccg ttgcacctgc caggagaaca ggcagtggca 500
tggtggatcc agacatgac aaagccatca accagggcaa ctatggctgg 550
caggctggga accacagcgc cttctggggc atgaccctgg atgagggcat 600
tcgctaccgc ctgggcacca tccgcccatc ttctcggtc atgaacatgc 650
atgaaattta tacagtgtg aaccagggg aggtgcttcc cacagccttc 700
gaggcctctg agaagtggcc caacctgatt catgagcctc ttgaccaagg 750
caactgtgca ggctcctggg ccttctccac agcagctgtg gcatccgac 800
gtgtctcaat ccattctctg ggacacatga cgctgtcct gtcgccccag 850
aacctgctgt cttgtgacac ccaccagcag cagggtgcc gcggtgggcg 900
tctcgatggg gcttgggtgt tcttgcgtcg ccgaggggtg gtgtctgacc 950
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tgccactgc cccaacagct atgttaataa caatgacatc taccaggtca 1100
ctcctgtcta ccgctcggc tccaacgaca aggagatcat gaaggagctg 1150
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cctatacaag ggaggcatct acagccacac gccagtgagc cttgggaggc 1250
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ggagaggaga cgctgccaga tggaaggacg ctcaaatact ggactgcggc 1350
caactcctgg ggcccagcct ggggcgagag gggccacttc cgcctcgtgc 1400
gcggcgtcaa tgagtgcgac atcgagagct tcgtgctggg cgtctggggc 1450
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agccgcgggc aggcgagact ggcggagccc ccagacctcc cagtggggac 1700

ggggcagggc ctggcctggg aagagcacag ctgcagatcc caggcctctg 1750
 gcgccccac tcaagactac caaagccagg acacctcaag tctccagccc 1800
 caatacccca cccaatccc gtattctttt tttttttttt ttagacaggg 1850
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 taacctccga ctctggggtt caagtgacct tcccacctca gcctctcaag 1950
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 tgtaaagagg ggggtctcac tgtgttgccc aggctgggtt cgaactcctg 2050
 ggctcaagcg gtccacctgc ctccgcctcc caaagtgctg ggattgcagg 2100
 catgagccac tgcaccagc cctgtattct tattcttcag atatttattt 2150
 ttcttttcac tgttttaaaa taaaaccaa gtattgataa aaaaaa 2197

<210> 314

<211> 164

<212> PRT

<213> Homo Sapien

<400> 314

Met	Trp	Arg	Cys	Pro	Leu	Gly	Leu	Leu	Leu	Leu	Pro	Leu	Ala
1				5					10				15
Gly	His	Leu	Ala	Leu	Gly	Ala	Gln	Gln	Gly	Arg	Gly	Arg	Glu
				20					25				30
Leu	Ala	Pro	Gly	Leu	His	Leu	Arg	Gly	Ile	Arg	Asp	Ala	Gly
				35					40				45
Arg	Tyr	Cys	Gln	Glu	Gln	Asp	Leu	Cys	Cys	Arg	Gly	Arg	Ala
				50					55				60
Asp	Cys	Ala	Leu	Pro	Tyr	Leu	Gly	Ala	Ile	Cys	Tyr	Cys	Asp
				65					70				75
Phe	Cys	Asn	Arg	Thr	Val	Ser	Asp	Cys	Cys	Pro	Asp	Phe	Trp
				80					85				90
Phe	Cys	Leu	Gly	Val	Pro	Pro	Pro	Phe	Pro	Pro	Ile	Gln	Gly
				95					100				105
Met	His	Gly	Gly	Arg	Ile	Tyr	Pro	Val	Leu	Gly	Thr	Tyr	Trp
				110					115				120
Asn	Cys	Asn	Arg	Cys	Thr	Cys	Gln	Glu	Asn	Arg	Gln	Trp	His
				125					130				135
Gly	Ser	Arg	His	Asp	Gln	Ser	His	Gln	Pro	Gly	Gln	Leu	Trp
				140					145				150
Ala	Gly	Trp	Glu	Pro	Gln	Arg	Leu	Leu	Gly	His	Asp	Pro	Gly
				155					160				

<210> 315
 <211> 1024
 <212> DNA
 <213> Homo Sapien

<400> 315
 cggacgcgtg ggcccctggt gggcccagca agatggatct actgtggatc 50
 ctgccctccc tgtggcttct cctgcttggg gggcctgcct gcctgaagac 100
 ccaggaacac cccagctgcc caggaccag ggaactggaa gccagcaaag 150
 ttgtcctcct gccagttgt cccggagctc caggaagtcc tggggagaag 200
 ggagccccag gtcctcaagg gccacctgga ccaccaggca agatggggccc 250
 caaggggtgag ccaggcccca gaaactgccg ggagctgttg agccagggcg 300
 ccaccttgag cggctggtac catctgtgcc tacctgaggg cagggccctc 350
 ccagtctttt gtgacatgga caccgagggg ggcggctggc tgggtgtttca 400
 gaggcgccag gatggttctg tggatttctt ccgctcttgg tcctcctaca 450
 gagcagggtt tgggaaccaa gagtctgaat tctggctggg aaatgagaat 500
 ttgcaccage ttactctcca gggtaactgg gagctgcggg tagagctgga 550
 agactttaat ggtaaccgta ctttcgcca ctatgcgacc ttccgcctcc 600
 tcggtgaggt agaccactac cagctggcac tgggcaagtt ctcagagggc 650
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 tgacgctgac cagcattcaa gcaacagcaa ctgtgcagtg attgtccacg 750
 gtgcctggtg gtatgcatcc tgttaccgat caaatctcaa tggtcgctat 800
 gcagtgtctg aggetgccc ccacaaatat ggcattgact gggcctcagg 850
 ccgtggtgtg ggccaccctt accgcagggt tcggatgatg cttcgatagg 900
 gcactctggc agccagtgcc cttatctctc ctgtacagct tccggatcgt 950
 cagccacctt gcctttgcca accacctctg cttgcctgtc cacatttaaa 1000
 aataaaatca ttttagccct ttca 1024

<210> 316
 <211> 288
 <212> PRT
 <213> Homo Sapien

<400> 316
 Met Asp Leu Leu Trp Ile Leu Pro Ser Leu Trp Leu Leu Leu Leu
 1 5 10 15
 Gly Gly Pro Ala Cys Leu Lys Thr Gln Glu His Pro Ser Cys Pro

	20	25	30
Gly Pro Arg Glu Leu Glu Ala Ser Lys Val Val Leu Leu Pro Ser	35	40	45
Cys Pro Gly Ala Pro Gly Ser Pro Gly Glu Lys Gly Ala Pro Gly	50	55	60
Pro Gln Gly Pro Pro Gly Pro Pro Gly Lys Met Gly Pro Lys Gly	65	70	75
Glu Pro Gly Pro Arg Asn Cys Arg Glu Leu Leu Ser Gln Gly Ala	80	85	90
Thr Leu Ser Gly Trp Tyr His Leu Cys Leu Pro Glu Gly Arg Ala	95	100	105
Leu Pro Val Phe Cys Asp Met Asp Thr Glu Gly Gly Gly Trp Leu	110	115	120
Val Phe Gln Arg Arg Gln Asp Gly Ser Val Asp Phe Phe Arg Ser	125	130	135
Trp Ser Ser Tyr Arg Ala Gly Phe Gly Asn Gln Glu Ser Glu Phe	140	145	150
Trp Leu Gly Asn Glu Asn Leu His Gln Leu Thr Leu Gln Gly Asn	155	160	165
Trp Glu Leu Arg Val Glu Leu Glu Asp Phe Asn Gly Asn Arg Thr	170	175	180
Phe Ala His Tyr Ala Thr Phe Arg Leu Leu Gly Glu Val Asp His	185	190	195
Tyr Gln Leu Ala Leu Gly Lys Phe Ser Glu Gly Thr Ala Gly Asp	200	205	210
Ser Leu Ser Leu His Ser Gly Arg Pro Phe Thr Thr Tyr Asp Ala	215	220	225
Asp His Asp Ser Ser Asn Ser Asn Cys Ala Val Ile Val His Gly	230	235	240
Ala Trp Trp Tyr Ala Ser Cys Tyr Arg Ser Asn Leu Asn Gly Arg	245	250	255
Tyr Ala Val Ser Glu Ala Ala Ala His Lys Tyr Gly Ile Asp Trp	260	265	270
Ala Ser Gly Arg Gly Val Gly His Pro Tyr Arg Arg Val Arg Met	275	280	285
Met Leu Arg			

<210> 317
 <211> 1875

<212> DNA

<213> Homo Sapien

<400> 317

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tgaagagccc gacagctaca cggaatgcac agatggctat gaggggacc 200
cagacagcca gcaactgccg gatgtcaacg agtgtctgac catccctgag 250
gcctgcaagg gggaaatgaa gtgcatcaac cactacgggg gctacttggt 300
cctgccccgc tccgctgccg tcatcaacga cctacatggc gagggacccc 350
cgccaccagt gcctcccgt caacacccca acccctgccc accaggctat 400
gagcccgacg atcaggacag ctgtgtggat gtggacgagt gtgcccaggc 450
cctgcaacgac tgcgcggggc gccaggactg ccataacttg cctggctcct 500
atcagtgcac ctgccctgat ggttaccgca agatcggggc cgagtgtgtg 550
gacatagacg agtgccgcta ccgctactgc cagcaccgct gcgtgaacct 600
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acaaccgctc ctgtgttgat gtgaacgagt gtgacatggg ggccccatgc 700
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tggaactcg caggggggact ttacattag gcaaatcaac aacgtcagcg 1250
ccatgctggt cctcgcccgg ccggtgacgg gccccggga gtacgtgctg 1300
gacctggaga tggtcaccat gaattccctc atgagctacc gggccagctc 1350

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 acgaggcaac tggaaaaaaaa aaaaa 1875

<210> 318

<211> 443

<212> PRT

<213> Homo Sapien

<400> 318

Met	Leu	Pro	Cys	Ala	Ser	Cys	Leu	Pro	Gly	Ser	Leu	Leu	Leu	Trp
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Ala	Leu	Leu	Leu	Leu	Leu	Leu	Gly	Ser	Ala	Ser	Pro	Gln	Asp	Ser
				20					25					30
Glu	Glu	Pro	Asp	Ser	Tyr	Thr	Glu	Cys	Thr	Asp	Gly	Tyr	Glu	Trp
				35					40					45
Asp	Pro	Asp	Ser	Gln	His	Cys	Arg	Asp	Val	Asn	Glu	Cys	Leu	Thr
				50					55					60
Ile	Pro	Glu	Ala	Cys	Lys	Gly	Glu	Met	Lys	Cys	Ile	Asn	His	Tyr
				65					70					75
Gly	Gly	Tyr	Leu	Cys	Leu	Pro	Arg	Ser	Ala	Ala	Val	Ile	Asn	Asp
				80					85					90
Leu	His	Gly	Glu	Gly	Pro	Pro	Pro	Pro	Val	Pro	Pro	Ala	Gln	His
				95					100					105
Pro	Asn	Pro	Cys	Pro	Pro	Gly	Tyr	Glu	Pro	Asp	Asp	Gln	Asp	Ser
				110					115					120
Cys	Val	Asp	Val	Asp	Glu	Cys	Ala	Gln	Ala	Leu	His	Asp	Cys	Arg
				125					130					135
Pro	Ser	Gln	Asp	Cys	His	Asn	Leu	Pro	Gly	Ser	Tyr	Gln	Cys	Thr
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<210> 319
 <211> 1266
 <212> DNA
 <213> Homo Sapien

<400> 319
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 gatggctgtg gctgctgccg ggtatgtgca cggcggctgg gggagccctg 200
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 tgccgctgtg cagcgaggat gtgcggctgc ccagctggga ctgccccac 450
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 ccaaggaggg ggactgggga cccagcccc tccagcccaa ggacccagct 550
 tttctggcct tgtctcttcc ctgccccctg gtgtccccctg cccagaatgg 600
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 tgtgcctgtc caggccctgc ccaccctcca ggggtcgcag tccacaaaac 750
 agtgccttct agagccgggc tgggaatggg gacacggtgt ccaccatccc 800
 cagctggtgg ccctgtgcct gggccctggg ctgatggaag atggtccgtg 850
 cccaggccct tggtgcagg caacacttta gcttgggtcc accatgcaga 900
 acaccaatat taacacgctg cctggtctgt ctggatcccc aggtatggca 950
 gaggtgcaag acctagtccc ctttcctcta actcactgcc taggaggctg 1000
 gccaaagtgt ccagggtcct ctagccact ccctgcctac acacacagcc 1050
 tatatcaaac atgcacacgg gcgagctttc tctccgactt cccctgggca 1100
 agagatggga caagcagtc cttaatattg aggctgcagc aggtgctggg 1150
 ctggactggc catttttctg ggggtaggat gaagagaagg cacacagaga 1200
 ttctggatct cctgctgcct tttctggagt ttgtaaaatt gttcctgaat 1250

acaagcctat gcgtga 1266

<210> 320

<211> 250

<212> PRT

<213> Homo Sapien

<400> 320

Met Arg Gly Thr Pro Lys Thr His Leu Leu Ala Phe Ser Leu Leu
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Cys Leu Leu Ser Lys Val Arg Thr Gln Leu Cys Pro Thr Pro Cys
20 25 30

Thr Cys Pro Trp Pro Pro Pro Arg Cys Pro Leu Gly Val Pro Leu
35 40 45

Val Leu Asp Gly Cys Gly Cys Cys Arg Val Cys Ala Arg Arg Leu
50 55 60

Gly Glu Pro Cys Asp Gln Leu His Val Cys Asp Ala Ser Gln Gly
65 70 75

Leu Val Cys Gln Pro Gly Ala Gly Pro Gly Gly Arg Gly Ala Leu
80 85 90

Cys Leu Leu Ala Glu Asp Asp Ser Ser Cys Glu Val Asn Gly Arg
95 100 105

Leu Tyr Arg Glu Gly Glu Thr Phe Gln Pro His Cys Ser Ile Arg
110 115 120

Cys Arg Cys Glu Asp Gly Gly Phe Thr Cys Val Pro Leu Cys Ser
125 130 135

Glu Asp Val Arg Leu Pro Ser Trp Asp Cys Pro His Pro Arg Arg
140 145 150

Val Glu Val Leu Gly Lys Cys Cys Pro Glu Trp Val Cys Gly Gln
155 160 165

Gly Gly Gly Leu Gly Thr Gln Pro Leu Pro Ala Gln Gly Pro Gln
170 175 180

Phe Ser Gly Leu Val Ser Ser Leu Pro Pro Gly Val Pro Cys Pro
185 190 195

Glu Trp Ser Thr Ala Trp Gly Pro Cys Ser Thr Thr Cys Gly Leu
200 205 210

Gly Met Ala Thr Arg Val Ser Asn Gln Asn Arg Phe Cys Arg Leu
215 220 225

Glu Thr Gln Arg Arg Leu Cys Leu Ser Arg Pro Cys Pro Pro Ser
230 235 240

Arg Gly Arg Ser Pro Gln Asn Ser Ala Phe
245 250

<210> 321
 <211> 783
 <212> DNA
 <213> Homo Sapien

<400> 321
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 tcccagggac tggagcagca ctagcaagct ctggaggatg agccaggagt 150
 ctggaattga ggctgagcca aagaccccag ggccgtctca gtctcataaa 200
 aggggatcag gcaggaggag tttgggagaa acctgagaag ggcctgattt 250
 gcagcatcat gatgggcctc tccttggcct ctgctgtgct cctggcctcc 300
 ctctgagtc tccaccttgg aactgccaca cgtgggagtg acatatccaa 350
 gacctgctgc ttccaatata gccacaagcc ccttccttgg acctgggtgc 400
 gaagctatga attcaccagt aacagctgct cccagcgggc tgtgatattc 450
 actaccaaaa gaggaagaa agtctgtacc catccaagga aaaaatgggt 500
 gcaaaaatac atttctttac tgaaaactcc gaaacaattg tgactcagct 550
 gaattttcat ccgaggacgc ttggaccccg ctcttggctc tgcagccctc 600
 tggggagcct gcggaatctt ttctgaaggc tacatggacc cgctggggag 650
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 tgaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 750
 aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaa 783

<210> 322
 <211> 94
 <212> PRT
 <213> Homo Sapien

<400> 322
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 Leu Ser Leu His Leu Gly Thr Ala Thr Arg Gly Ser Asp Ile Ser
 20 25 30
 Lys Thr Cys Cys Phe Gln Tyr Ser His Lys Pro Leu Pro Trp Thr
 35 40 45
 Trp Val Arg Ser Tyr Glu Phe Thr Ser Asn Ser Cys Ser Gln Arg
 50 55 60
 Ala Val Ile Phe Thr Thr Lys Arg Gly Lys Lys Val Cys Thr His
 65 70 75

Pro Arg Lys Lys Trp Val Gln Lys Tyr Ile Ser Leu Leu Lys Thr
80 85 90

Pro Lys Gln Leu

<210> 323
<211> 2290
<212> DNA
<213> Homo Sapien

<400> 323
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cgggctgccc gccccgtgc gagtgtccg cccaggaccg cgctgtgctg 200
tgccaccgca agtgctttgt ggcagtcccc gagggcatcc ccaccgagac 250
gcgcctgctg gacctaggca agaaccgcat caaaacgctc aaccaggacg 300
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gctgggtctc cgcagcaacc gcctgaagct catcccgcta ggcgtcttca 450
ctggcctcag caacctgacc aagcaggaca tcagcgagaa caagatcggt 500
atcctactgg actacatggt tcaggacctg tacaacctca agtcactgga 550
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 ctctggctct caccgccaaa gcacctggtc tcagccaaga gcaatgggcg 1450
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 agtccgccg acgcgcccc caagttcaac atgaagatga tatgaggccg 1900
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<210> 324

<211> 620

<212> PRT

<213> Homo Sapien

<400> 324

Met	Gln	Val	Ser	Lys	Arg	Met	Leu	Ala	Gly	Gly	Val	Arg	Ser	Met
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Pro	Ser	Pro	Leu	Leu	Ala	Cys	Trp	Gln	Pro	Ile	Leu	Leu	Leu	Val
				20				25						30

Leu	Gly	Ser	Val	Leu	Ser	Gly	Ser	Ala	Thr	Gly	Cys	Pro	Pro	Arg
				35					40					45
Cys	Glu	Cys	Ser	Ala	Gln	Asp	Arg	Ala	Val	Leu	Cys	His	Arg	Lys
				50					55					60
Cys	Phe	Val	Ala	Val	Pro	Glu	Gly	Ile	Pro	Thr	Glu	Thr	Arg	Leu
				65					70					75
Leu	Asp	Leu	Gly	Lys	Asn	Arg	Ile	Lys	Thr	Leu	Asn	Gln	Asp	Glu
				80					85					90
Phe	Ala	Ser	Phe	Pro	His	Leu	Glu	Glu	Leu	Glu	Leu	Asn	Glu	Asn
				95					100					105
Ile	Val	Ser	Ala	Val	Glu	Pro	Gly	Ala	Phe	Asn	Asn	Leu	Phe	Asn
				110					115					120
Leu	Arg	Thr	Leu	Gly	Leu	Arg	Ser	Asn	Arg	Leu	Lys	Leu	Ile	Pro
				125					130					135
Leu	Gly	Val	Phe	Thr	Gly	Leu	Ser	Asn	Leu	Thr	Lys	Gln	Asp	Ile
				140					145					150
Ser	Glu	Asn	Lys	Ile	Val	Ile	Leu	Leu	Asp	Tyr	Met	Phe	Gln	Asp
				155					160					165
Leu	Tyr	Asn	Leu	Lys	Ser	Leu	Glu	Val	Gly	Asp	Asn	Asp	Leu	Val
				170					175					180
Tyr	Ile	Ser	His	Arg	Ala	Phe	Ser	Gly	Leu	Asn	Ser	Leu	Glu	Gln
				185					190					195
Leu	Thr	Leu	Glu	Lys	Cys	Asn	Leu	Thr	Ser	Ile	Pro	Thr	Glu	Ala
				200					205					210
Leu	Ser	His	Leu	His	Gly	Leu	Ile	Val	Leu	Arg	Leu	Arg	His	Leu
				215					220					225
Asn	Ile	Asn	Ala	Ile	Arg	Asp	Tyr	Ser	Phe	Lys	Arg	Leu	Tyr	Arg
				230					235					240
Leu	Lys	Val	Leu	Glu	Ile	Ser	His	Trp	Pro	Tyr	Leu	Asp	Thr	Met
				245					250					255
Thr	Pro	Asn	Cys	Leu	Tyr	Gly	Leu	Asn	Leu	Thr	Ser	Leu	Ser	Ile
				260					265					270
Thr	His	Cys	Asn	Leu	Thr	Ala	Val	Pro	Tyr	Leu	Ala	Val	Arg	His
				275					280					285
Leu	Val	Tyr	Leu	Arg	Phe	Leu	Asn	Leu	Ser	Tyr	Asn	Pro	Ile	Ser
				290					295					300
Thr	Ile	Glu	Gly	Ser	Met	Leu	His	Glu	Leu	Leu	Arg	Leu	Gln	Glu
				305					310					315
Ile	Gln	Leu	Val	Gly	Gly	Gln	Leu	Ala	Val	Val	Glu	Pro	Tyr	Ala

Asn Met Lys Met Ile
620

<210> 325
<211> 1670
<212> DNA
<213> Homo Sapien

<400> 325
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ttaaagggac agaatactta 1670

<210> 326

<211> 328

<212> PRT

<213> Homo Sapien

<400> 326

Met	Gly	Ala	Ala	Ala	Arg	Leu	Ser	Ala	Pro	Arg	Ala	Leu	Val	Leu	1	5	10	15
Trp	Ala	Ala	Leu	Gly	Ala	Ala	Ala	His	Ile	Gly	Pro	Ala	Pro	Asp	20	25	30	
Pro	Glu	Asp	Trp	Trp	Ser	Tyr	Lys	Asp	Asn	Leu	Gln	Gly	Asn	Phe	35	40	45	
Val	Pro	Gly	Pro	Pro	Phe	Trp	Gly	Leu	Val	Asn	Ala	Ala	Trp	Ser	50	55	60	
Leu	Cys	Ala	Val	Gly	Lys	Arg	Gln	Ser	Pro	Val	Asp	Val	Glu	Leu	65	70	75	
Lys	Arg	Val	Leu	Tyr	Asp	Pro	Phe	Leu	Pro	Pro	Leu	Arg	Leu	Ser	80	85	90	
Thr	Gly	Gly	Glu	Lys	Leu	Arg	Gly	Thr	Leu	Tyr	Asn	Thr	Gly	Arg	95	100	105	
His	Val	Ser	Phe	Leu	Pro	Ala	Pro	Arg	Pro	Val	Val	Asn	Val	Ser	110	115	120	
Gly	Gly	Pro	Leu	Leu	Tyr	Ser	His	Arg	Leu	Ser	Glu	Leu	Arg	Leu	125	130	135	
Leu	Phe	Gly	Ala	Arg	Asp	Gly	Ala	Gly	Ser	Glu	His	Gln	Ile	Asn	140	145	150	
His	Gln	Gly	Phe	Ser	Ala	Glu	Val	Gln	Leu	Ile	His	Phe	Asn	Gln	155	160	165	
Glu	Leu	Tyr	Gly	Asn	Phe	Ser	Ala	Ala	Ser	Arg	Gly	Pro	Asn	Gly				

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 gctctatata aatgctcaga gttctttatg tatttcttat tggcattcaa 2400
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 aaat 2454

<210> 328
 <211> 379
 <212> PRT
 <213> Homo Sapien

<400> 328
 Met Lys Glu Tyr Val Leu Leu Leu Phe Leu Ala Leu Cys Ser Ala
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 Lys Pro Phe Phe Ser Pro Ser His Ile Ala Leu Lys Asn Met Met
 20 25 30
 Leu Lys Asp Met Glu Asp Thr Asp Asp Asp Asp Asp Asp Asp
 35 40 45
 Asp Asp Asp Asp Asp Glu Asp Asn Ser Leu Phe Pro Thr Arg Glu
 50 55 60
 Pro Arg Ser His Phe Phe Pro Phe Asp Leu Phe Pro Met Cys Pro
 65 70 75
 Phe Gly Cys Gln Cys Tyr Ser Arg Val Val His Cys Ser Asp Leu
 80 85 90
 Gly Leu Thr Ser Val Pro Thr Asn Ile Pro Phe Asp Thr Arg Met
 95 100 105
 Leu Asp Leu Gln Asn Asn Lys Ile Lys Glu Ile Lys Glu Asn Asp
 110 115 120
 Phe Lys Gly Leu Thr Ser Leu Tyr Gly Leu Ile Leu Asn Asn Asn
 125 130 135
 Lys Leu Thr Lys Ile His Pro Lys Ala Phe Leu Thr Thr Lys Lys
 140 145 150


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Leu Arg Arg Leu Tyr Leu Ser His Asn Gln Leu Ser Glu Ile Pro
155                                160                                165

Leu Asn Leu Pro Lys Ser Leu Ala Glu Leu Arg Ile His Glu Asn
170                                175                                180

Lys Val Lys Lys Ile Gln Lys Asp Thr Phe Lys Gly Met Asn Ala
185                                190                                195

Leu His Val Leu Glu Met Ser Ala Asn Pro Leu Asp Asn Asn Gly
200                                205                                210

Ile Glu Pro Gly Ala Phe Glu Gly Val Thr Val Phe His Ile Arg
215                                220                                225

Ile Ala Glu Ala Lys Leu Thr Ser Val Pro Lys Gly Leu Pro Pro
230                                235                                240

Thr Leu Leu Glu Leu His Leu Asp Tyr Asn Lys Ile Ser Thr Val
245                                250                                255

Glu Leu Glu Asp Phe Lys Arg Tyr Lys Glu Leu Gln Arg Leu Gly
260                                265                                270

Leu Gly Asn Asn Lys Ile Thr Asp Ile Glu Asn Gly Ser Leu Ala
275                                280                                285

Asn Ile Pro Arg Val Arg Glu Ile His Leu Glu Asn Asn Lys Leu
290                                295                                300

Lys Lys Ile Pro Ser Gly Leu Pro Glu Leu Lys Tyr Leu Gln Ile
305                                310                                315

Ile Phe Leu His Ser Asn Ser Ile Ala Arg Val Gly Val Asn Asp
320                                325                                330

Phe Cys Pro Thr Val Pro Lys Met Lys Lys Ser Leu Tyr Ser Ala
335                                340                                345

Ile Ser Leu Phe Asn Asn Pro Val Lys Tyr Trp Glu Met Gln Pro
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Ala Thr Phe Arg Cys Val Leu Ser Arg Met Ser Val Gln Leu Gly
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Asn Phe Gly Met

<210> 329

<211> 1514

<212> DNA

<213> Homo Sapien

<400> 329

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 gcctttatatac aatg 1514

<210> 330
 <211> 428
 <212> PRT
 <213> Homo Sapien

<400> 330

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Val Leu Thr Ser Leu Ala Tyr Cys Leu His Gln Arg Arg Val Ala
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Leu Ala Glu Leu Gln Glu Ala Asp Gly Gln Cys Pro Val Asp Arg
 35 40 45

Ser Leu Leu Lys Leu Lys Met Val Gln Val Val Phe Arg His Gly
 50 55 60

Ala Arg Ser Pro Leu Lys Pro Leu Pro Leu Glu Glu Gln Val Glu
 65 70 75

Trp Asn Pro Gln Leu Leu Glu Val Pro Pro Gln Thr Gln Phe Asp
 80 85 90

Tyr Thr Val Thr Asn Leu Ala Gly Gly Pro Lys Pro Tyr Ser Pro
 95 100 105

Tyr Asp Ser Gln Tyr His Glu Thr Thr Leu Lys Gly Gly Met Phe
 110 115 120

Ala Gly Gln Leu Thr Lys Val Gly Met Gln Gln Met Phe Ala Leu
 125 130 135

Gly Glu Arg Leu Arg Lys Asn Tyr Val Glu Asp Ile Pro Phe Leu
 140 145 150

Ser Pro Thr Phe Asn Pro Gln Glu Val Phe Ile Arg Ser Thr Asn
 155 160 165

Ile Phe Arg Asn Leu Glu Ser Thr Arg Cys Leu Leu Ala Gly Leu
 170 175 180

Phe Gln Cys Gln Lys Glu Gly Pro Ile Ile Ile His Thr Asp Glu
 185 190 195

Ala Asp Ser Glu Val Leu Tyr Pro Asn Tyr Gln Ser Cys Trp Ser
 200 205 210

Leu Arg Gln Arg Thr Arg Gly Arg Arg Gln Thr Ala Ser Leu Gln
 215 220 225

Pro Gly Ile Ser Glu Asp Leu Lys Lys Val Lys Asp Arg Met Gly
 230 235 240

Ile Asp Ser Ser Asp Lys Val Asp Phe Phe Ile Leu Leu Asp Asn
 245 250 255

Val Ala Ala Glu Gln Ala His Asn Leu Pro Ser Cys Pro Met Leu

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<210> 332

<211> 552

<212> PRT

<213> Homo Sapien

<400> 332

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			20						25					30
Glu	Gly	Gln	Pro	Gly	Lys	Val	Glu	Gln	Met	Ser	Thr	His	Arg	Ser
				35					40					45
Arg	Leu	Leu	Thr	Ala	Ala	Pro	Leu	Ser	Met	Glu	Gln	Arg	Gln	Pro
				50					55					60
Trp	Pro	Arg	Ala	Leu	Glu	Val	Asp	Ser	Arg	Ser	Val	Val	Leu	Leu
				65					70					75
Ser	Val	Val	Trp	Val	Leu	Leu	Ala	Pro	Pro	Ala	Ala	Gly	Met	Pro
				80					85					90
Gln	Phe	Ser	Thr	Phe	His	Ser	Glu	Asn	Arg	Asp	Trp	Thr	Phe	Asn
				95					100					105
His	Leu	Thr	Val	His	Gln	Gly	Thr	Gly	Ala	Val	Tyr	Val	Gly	Ala
				110					115					120
Ile	Asn	Arg	Val	Tyr	Lys	Leu	Thr	Gly	Asn	Leu	Thr	Ile	Gln	Val
				125					130					135
Ala	His	Lys	Thr	Gly	Pro	Glu	Glu	Asp	Asn	Lys	Ser	Arg	Tyr	Pro

				140					145					150
Pro	Leu	Ile	Val	Gln 155	Pro	Cys	Ser	Glu	Val 160	Leu	Thr	Leu	Thr	Asn 165
Asn	Val	Asn	Lys	Leu 170	Leu	Ile	Ile	Asp	Tyr 175	Ser	Glu	Asn	Arg	Leu 180
Leu	Ala	Cys	Gly	Ser 185	Leu	Tyr	Gln	Gly	Val 190	Cys	Lys	Leu	Leu	Arg 195
Leu	Asp	Asp	Leu	Phe 200	Ile	Leu	Val	Glu	Pro 205	Ser	His	Lys	Lys	Glu 210
His	Tyr	Leu	Ser	Ser 215	Val	Asn	Lys	Thr	Gly 220	Thr	Met	Tyr	Gly	Val 225
Ile	Val	Arg	Ser	Glu 230	Gly	Glu	Asp	Gly	Lys 235	Leu	Phe	Ile	Gly	Thr 240
Ala	Val	Asp	Gly	Lys 245	Gln	Asp	Tyr	Phe	Pro 250	Thr	Leu	Ser	Ser	Arg 255
Lys	Leu	Pro	Arg	Asp 260	Pro	Glu	Ser	Ser	Ala 265	Met	Leu	Asp	Tyr	Glu 270
Leu	His	Ser	Asp	Phe 275	Val	Ser	Ser	Leu	Ile 280	Lys	Ile	Pro	Ser	Asp 285
Thr	Leu	Ala	Leu	Val 290	Ser	His	Phe	Asp	Ile 295	Phe	Tyr	Ile	Tyr	Gly 300
Phe	Ala	Ser	Gly	Gly 305	Phe	Val	Tyr	Phe	Leu 310	Thr	Val	Gln	Pro	Glu 315
Thr	Pro	Glu	Gly	Val 320	Ala	Ile	Asn	Ser	Ala 325	Gly	Asp	Leu	Phe	Tyr 330
Thr	Ser	Arg	Ile	Val 335	Arg	Leu	Cys	Lys	Asp 340	Asp	Pro	Lys	Phe	His 345
Ser	Tyr	Val	Ser	Leu 350	Pro	Phe	Gly	Cys	Thr 355	Arg	Ala	Gly	Val	Glu 360
Tyr	Arg	Leu	Leu	Gln 365	Ala	Ala	Tyr	Leu	Ala 370	Lys	Pro	Gly	Asp	Ser 375
Leu	Ala	Gln	Ala	Phe 380	Asn	Ile	Thr	Ser	Gln 385	Asp	Asp	Val	Leu	Phe 390
Ala	Ile	Phe	Ser	Lys 395	Gly	Gln	Lys	Gln	Tyr 400	His	His	Pro	Pro	Asp 405
Asp	Ser	Ala	Leu	Cys 410	Ala	Phe	Pro	Ile	Arg 415	Ala	Ile	Asn	Leu	Gln 420
Ile	Lys	Glu	Arg	Leu 425	Gln	Ser	Cys	Tyr	Gln 430	Gly	Glu	Gly	Asn	Leu 435

Glu	Leu	Asn	Trp	Leu	Leu	Gly	Lys	Asp	Val	Gln	Cys	Thr	Lys	Ala
				440					445					450
Pro	Val	Pro	Ile	Asp	Asp	Asn	Phe	Cys	Gly	Leu	Asp	Ile	Asn	Gln
				455					460					465
Pro	Leu	Gly	Gly	Ser	Thr	Pro	Val	Glu	Gly	Leu	Thr	Leu	Tyr	Thr
				470					475					480
Thr	Ser	Arg	Asp	Arg	Met	Thr	Ser	Val	Ala	Ser	Tyr	Val	Tyr	Asn
				485					490					495
Gly	Tyr	Ser	Val	Val	Phe	Val	Gly	Thr	Lys	Ser	Gly	Lys	Leu	Lys
				500					505					510
Lys	Val	Arg	Val	Tyr	Glu	Phe	Arg	Cys	Ser	Asn	Ala	Ile	His	Leu
				515					520					525
Leu	Ser	Lys	Glu	Ser	Leu	Leu	Glu	Gly	Ser	Tyr	Trp	Trp	Arg	Phe
				530					535					540
Asn	Tyr	Arg	Gln	Leu	Tyr	Phe	Leu	Gly	Glu	Gln	Arg			
				545					550					

<210> 333
 <211> 1520
 <212> DNA
 <213> Homo Sapien

<400> 333
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<210> 334

<211> 433

<212> PRT

<213> Homo Sapien

<400> 334

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			20						25					30
Pro	Leu	Val	Asp	Gly	His	Asn	Asp	Leu	Pro	Leu	Val	Leu	Arg	Gln
				35					40					45
Val	Tyr	Gln	Lys	Gly	Leu	Gln	Asp	Val	Asn	Leu	Arg	Asn	Phe	Ser
				50					55					60
Tyr	Gly	Gln	Thr	Ser	Leu	Asp	Arg	Leu	Arg	Asp	Gly	Leu	Val	Gly
				65					70					75
Ala	Gln	Phe	Trp	Ser	Ala	Tyr	Val	Pro	Cys	Gln	Thr	Gln	Asp	Arg
				80					85					90

Asp	Ala	Leu	Arg	Leu	Thr	Leu	Glu	Gln	Ile	Asp	Leu	Ile	Arg	Arg	95	100	105
Met	Cys	Ala	Ser	Tyr	Ser	Glu	Leu	Glu	Leu	Val	Thr	Ser	Ala	Lys	110	115	120
Ala	Leu	Asn	Asp	Thr	Gln	Lys	Leu	Ala	Cys	Leu	Ile	Gly	Val	Glu	125	130	135
Gly	Gly	His	Ser	Leu	Asp	Asn	Ser	Leu	Ser	Ile	Leu	Arg	Thr	Phe	140	145	150
Tyr	Met	Leu	Gly	Val	Arg	Tyr	Leu	Thr	Leu	Thr	His	Thr	Cys	Asn	155	160	165
Thr	Pro	Trp	Ala	Glu	Ser	Ser	Ala	Lys	Gly	Val	His	Ser	Phe	Tyr	170	175	180
Asn	Asn	Ile	Ser	Gly	Leu	Thr	Asp	Phe	Gly	Glu	Lys	Val	Val	Ala	185	190	195
Glu	Met	Asn	Arg	Leu	Gly	Met	Met	Val	Asp	Leu	Ser	His	Val	Ser	200	205	210
Asp	Ala	Val	Ala	Arg	Arg	Ala	Leu	Glu	Val	Ser	Gln	Ala	Pro	Val	215	220	225
Ile	Phe	Ser	His	Ser	Ala	Ala	Arg	Gly	Val	Cys	Asn	Ser	Ala	Arg	230	235	240
Asn	Val	Pro	Asp	Asp	Ile	Leu	Gln	Leu	Leu	Lys	Lys	Asn	Gly	Gly	245	250	255
Val	Val	Met	Val	Ser	Leu	Ser	Met	Gly	Val	Ile	Gln	Cys	Asn	Pro	260	265	270
Ser	Ala	Asn	Val	Ser	Thr	Val	Ala	Asp	His	Phe	Asp	His	Ile	Lys	275	280	285
Ala	Val	Ile	Gly	Ser	Lys	Phe	Ile	Gly	Ile	Gly	Gly	Asp	Tyr	Asp	290	295	300
Gly	Ala	Gly	Lys	Phe	Pro	Gln	Gly	Leu	Glu	Asp	Val	Ser	Thr	Tyr	305	310	315
Pro	Val	Leu	Ile	Glu	Glu	Leu	Leu	Ser	Arg	Gly	Trp	Ser	Glu	Glu	320	325	330
Glu	Leu	Gln	Gly	Val	Leu	Arg	Gly	Asn	Leu	Leu	Arg	Val	Phe	Arg	335	340	345
Gln	Val	Glu	Lys	Val	Gln	Glu	Glu	Asn	Lys	Trp	Gln	Ser	Pro	Leu	350	355	360
Glu	Asp	Lys	Phe	Pro	Asp	Glu	Gln	Leu	Ser	Ser	Ser	Cys	His	Ser	365	370	375
Asp	Leu	Ser	Arg	Leu	Arg	Gln	Arg	Gln	Ser	Leu	Thr	Ser	Gly	Gln			

380	385	390
Glu Leu Thr Glu Ile Pro Ile His Trp	Thr Ala Lys Leu Pro	Ala
395	400	405
Lys Trp Ser Val Ser Glu Ser Ser Pro	His Met Ala Pro Val	Leu
410	415	420
Ala Val Val Ala Thr Phe Pro Val Leu	Ile Leu Trp Leu	
425	430	

<210> 335
 <211> 1295
 <212> DNA
 <213> Homo Sapien

<400> 335
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 cggagggttgc agtgagctga gatcacgcca ctgcagtcca gcctgggtaa 1200
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 ggtttttacc tgtagaattc ttacaataaa tatagcttga tattc 1295

<210> 336

<211> 312

<212> PRT

<213> Homo Sapien

<400> 336

Met	Ala	Arg	Arg	Ser	Arg	His	Arg	Leu	Leu	Leu	Leu	Leu	Arg	1	5	10	15
Tyr	Leu	Val	Val	Ala	Leu	Gly	Tyr	His	Lys	Ala	Tyr	Gly	Phe	Ser	20	25	30
Ala	Pro	Lys	Asp	Gln	Gln	Val	Val	Thr	Ala	Val	Glu	Tyr	Gln	Glu	35	40	45
Ala	Ile	Leu	Ala	Cys	Lys	Thr	Pro	Lys	Lys	Thr	Val	Ser	Ser	Arg	50	55	60
Leu	Glu	Trp	Lys	Lys	Leu	Gly	Arg	Ser	Val	Ser	Phe	Val	Tyr	Tyr	65	70	75
Gln	Gln	Thr	Leu	Gln	Gly	Asp	Phe	Lys	Asn	Arg	Ala	Glu	Met	Ile	80	85	90
Asp	Phe	Asn	Ile	Arg	Ile	Lys	Asn	Val	Thr	Arg	Ser	Asp	Ala	Gly	95	100	105
Lys	Tyr	Arg	Cys	Glu	Val	Ser	Ala	Pro	Ser	Glu	Gln	Gly	Gln	Asn	110	115	120
Leu	Glu	Glu	Asp	Thr	Val	Thr	Leu	Glu	Val	Leu	Val	Ala	Pro	Ala	125	130	135
Val	Pro	Ser	Cys	Glu	Val	Pro	Ser	Ser	Ala	Leu	Ser	Gly	Thr	Val	140	145	150
Val	Glu	Leu	Arg	Cys	Gln	Asp	Lys	Glu	Gly	Asn	Pro	Ala	Pro	Glu	155	160	165
Tyr	Thr	Trp	Phe	Lys	Asp	Gly	Ile	Arg	Leu	Leu	Glu	Asn	Pro	Arg	170	175	180
Leu	Gly	Ser	Gln	Ser	Thr	Asn	Ser	Ser	Tyr	Thr	Met	Asn	Thr	Lys	185	190	195
Thr	Gly	Thr	Leu	Gln	Phe	Asn	Thr	Val	Ser	Lys	Leu	Asp	Thr	Gly	200	205	210

Glu Tyr Ser Cys	Glu Ala Arg Asn Ser	Val Gly Tyr Arg Arg	Cys
215		220	225
Pro Gly Lys Arg	Met Gln Val Asp Asp	Leu Asn Ile Ser Gly	Ile
230		235	240
Ile Ala Ala Val	Val Val Val Ala Leu	Val Ile Ser Val Cys	Gly
245		250	255
Leu Gly Val Cys	Tyr Ala Gln Arg Lys	Gly Tyr Phe Ser Lys	Glu
260		265	270
Thr Ser Phe Gln	Lys Ser Asn Ser Ser	Ser Lys Ala Thr Thr	Met
275		280	285
Ser Glu Asn Val	Gln Trp Leu Thr Pro	Val Ile Pro Ala Leu	Trp
290		295	300
Lys Ala Ala Ala	Gly Gly Ser Arg Gly	Gln Glu Phe	
305		310	

<210> 337
 <211> 1813
 <212> DNA
 <213> Homo Sapien

<400> 337
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 tgaccaactt gctgcggttt ttgttcctgg ggctgagtgc cctcgcgccc 200
 ccctcgcggg ccagctgca actgcacttg cccgccaacc ggttgacaggc 250
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 tttgtatgaa aaa 1813

<210> 338

<211> 390

<212> PRT

<213> Homo Sapien

<400> 338

Met	Ile	Ser	Leu	Pro	Gly	Pro	Leu	Val	Thr	Asn	Leu	Leu	Arg	Phe
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Leu	Phe	Leu	Gly	Leu	Ser	Ala	Leu	Ala	Pro	Pro	Ser	Arg	Ala	Gln
			20					25					30	

Leu	Gln	Leu	His	Leu	Pro	Ala	Asn	Arg	Leu	Gln	Ala	Val	Glu	Gly
			35					40					45	

Gly	Glu	Val	Val	Leu	Pro	Ala	Trp	Tyr	Thr	Leu	His	Gly	Glu	Val
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

Arg	Leu	Pro	Thr	Thr	Asp	Gly	Ala	His	Pro	Gln	Pro	Ile	Ser	Pro
				350					355					360
Ile	Pro	Gly	Gly	Val	Ser	Ser	Ser	Gly	Leu	Ser	Arg	Met	Gly	Ala
				365					370					375
Val	Pro	Val	Met	Val	Pro	Ala	Gln	Ser	Gln	Ala	Gly	Ser	Leu	Val
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<210> 339

<211> 3552

<212> DNA

<213> Homo Sapien

<400> 339

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 aa 3552

<210> 340
 <211> 386
 <212> PRT
 <213> Homo Sapien

<400> 340
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 Trp Leu Leu Asp Pro Lys Ile Leu Lys Phe Val Val Phe Ile Val
 35 40 45
 Ala Val Leu Leu Pro Val Arg Val Asp Ser Ala Thr Ile Pro Arg

				50						55					60	
Gln	Asp	Glu	Val	Pro	Gln	Gln	Thr	Val	Ala	Pro	Gln	Gln	Gln	Arg		
				65					70					75		
Arg	Ser	Leu	Lys	Glu	Glu	Glu	Cys	Pro	Ala	Gly	Ser	His	Arg	Ser		
				80					85					90		
Glu	Tyr	Thr	Gly	Ala	Cys	Asn	Pro	Cys	Thr	Glu	Gly	Val	Asp	Tyr		
				95					100					105		
Thr	Ile	Ala	Ser	Asn	Asn	Leu	Pro	Ser	Cys	Leu	Leu	Cys	Thr	Val		
				110					115					120		
Cys	Lys	Ser	Gly	Gln	Thr	Asn	Lys	Ser	Ser	Cys	Thr	Thr	Thr	Arg		
				125					130					135		
Asp	Thr	Val	Cys	Gln	Cys	Glu	Lys	Gly	Ser	Phe	Gln	Asp	Lys	Asn		
				140					145					150		
Ser	Pro	Glu	Met	Cys	Arg	Thr	Cys	Arg	Thr	Gly	Cys	Pro	Arg	Gly		
				155					160					165		
Met	Val	Lys	Val	Ser	Asn	Cys	Thr	Pro	Arg	Ser	Asp	Ile	Lys	Cys		
				170					175					180		
Lys	Asn	Glu	Ser	Ala	Ala	Ser	Ser	Thr	Gly	Lys	Thr	Pro	Ala	Ala		
				185					190					195		
Glu	Glu	Thr	Val	Thr	Thr	Ile	Leu	Gly	Met	Leu	Ala	Ser	Pro	Tyr		
				200					205					210		
His	Tyr	Leu	Ile	Ile	Ile	Val	Val	Leu	Val	Ile	Ile	Leu	Ala	Val		
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Val	Val	Val	Gly	Phe	Ser	Cys	Arg	Lys	Lys	Phe	Ile	Ser	Tyr	Leu		
				230					235					240		
Lys	Gly	Ile	Cys	Ser	Gly	Gly	Gly	Gly	Gly	Pro	Glu	Arg	Val	His		
				245					250					255		
Arg	Val	Leu	Phe	Arg	Arg	Arg	Ser	Cys	Pro	Ser	Arg	Val	Pro	Gly		
				260					265					270		
Ala	Glu	Asp	Asn	Ala	Arg	Asn	Glu	Thr	Leu	Ser	Asn	Arg	Tyr	Leu		
				275					280					285		
Gln	Pro	Thr	Gln	Val	Ser	Glu	Gln	Glu	Ile	Gln	Gly	Gln	Glu	Leu		
				290					295					300		
Ala	Glu	Leu	Thr	Gly	Val	Thr	Val	Glu	Ser	Pro	Glu	Glu	Pro	Gln		
				305					310					315		
Arg	Leu	Leu	Glu	Gln	Ala	Glu	Ala	Glu	Gly	Cys	Gln	Arg	Arg	Arg		
				320					325					330		
Leu	Leu	Val	Pro	Val	Asn	Asp	Ala	Asp	Ser	Ala	Asp	Ile	Ser	Thr		
				335					340					345		

Leu Leu Asp Ala Ser Ala Thr Leu Glu Glu Gly His Ala Lys Glu
350 355 360

Thr Ile Gln Asp Gln Leu Val Gly Ser Glu Lys Leu Phe Tyr Glu
365 370 375

Glu Asp Glu Ala Gly Ser Ala Thr Ser Cys Leu
380 385

<210> 341

<211> 1252

<212> DNA

<213> Homo Sapien

<400> 341

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<210> 342

<211> 364

<212> PRT

<213> Homo Sapien

<400> 342

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Leu	Ala	Leu	Gly	Gln	Ala	Val	Gln	Phe	Gln	Glu	Tyr	Val	Phe	Leu	20	25	30	
Gln	Phe	Leu	Gly	Leu	Asp	Lys	Ala	Pro	Ser	Pro	Gln	Lys	Phe	Gln	35	40	45	
Pro	Val	Pro	Tyr	Ile	Leu	Lys	Lys	Ile	Phe	Gln	Asp	Arg	Glu	Ala	50	55	60	
Ala	Ala	Thr	Thr	Gly	Val	Ser	Arg	Asp	Leu	Cys	Tyr	Val	Lys	Glu	65	70	75	
Leu	Gly	Val	Arg	Gly	Asn	Val	Leu	Arg	Phe	Leu	Pro	Asp	Gln	Gly	80	85	90	
Phe	Phe	Leu	Tyr	Pro	Lys	Lys	Ile	Ser	Gln	Ala	Ser	Ser	Cys	Leu	95	100	105	
Gln	Lys	Leu	Leu	Tyr	Phe	Asn	Leu	Ser	Ala	Ile	Lys	Glu	Arg	Glu	110	115	120	
Gln	Leu	Thr	Leu	Ala	Gln	Leu	Gly	Leu	Asp	Leu	Gly	Pro	Asn	Ser	125	130	135	
Tyr	Tyr	Asn	Leu	Gly	Pro	Glu	Leu	Glu	Leu	Ala	Leu	Phe	Leu	Val	140	145	150	
Gln	Glu	Pro	His	Val	Trp	Gly	Gln	Thr	Thr	Pro	Lys	Pro	Gly	Lys	155	160	165	
Met	Phe	Val	Leu	Arg	Ser	Val	Pro	Trp	Pro	Gln	Gly	Ala	Val	His	170	175	180	
Phe	Asn	Leu	Leu	Asp	Val	Ala	Lys	Asp	Trp	Asn	Asp	Asn	Pro	Arg	185	190	195	
Lys	Asn	Phe	Gly	Leu	Phe	Leu	Glu	Ile	Leu	Val	Lys	Glu	Asp	Arg	200	205	210	
Asp	Ser	Gly	Val	Asn	Phe	Gln	Pro	Glu	Asp	Thr	Cys	Ala	Arg	Leu	215	220	225	

Arg	Cys	Ser	Leu	His	Ala	Ser	Leu	Leu	Val	Val	Thr	Leu	Asn	Pro
				230					235					240
Asp	Gln	Cys	His	Pro	Ser	Arg	Lys	Arg	Arg	Ala	Ala	Ile	Pro	Val
				245					250					255
Pro	Lys	Leu	Ser	Cys	Lys	Asn	Leu	Cys	His	Arg	His	Gln	Leu	Phe
				260					265					270
Ile	Asn	Phe	Arg	Asp	Leu	Gly	Trp	His	Lys	Trp	Ile	Ile	Ala	Pro
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Lys	Gly	Phe	Met	Ala	Asn	Tyr	Cys	His	Gly	Glu	Cys	Pro	Phe	Ser
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Leu	Thr	Ile	Ser	Leu	Asn	Ser	Ser	Asn	Tyr	Ala	Phe	Met	Gln	Ala
				305					310					315
Leu	Met	His	Ala	Val	Asp	Pro	Glu	Ile	Pro	Gln	Ala	Val	Cys	Ile
				320					325					330
Pro	Thr	Lys	Leu	Ser	Pro	Ile	Ser	Met	Leu	Tyr	Gln	Asp	Asn	Asn
				335					340					345
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Cys Gly Cys Gly

<210> 343
 <211> 2917
 <212> DNA
 <213> Homo Sapien

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<210> 344

<211> 607

<212> PRT

<213> Homo Sapien

<400> 344

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Ser	Cys	Leu	Ala	Glu	Leu	Thr	Met	Ala	Glu	Ala	Glu	Gly	Asn	Ala
				20					25					30
Ser	Cys	Thr	Val	Ser	Leu	Gly	Gly	Ala	Asn	Met	Ala	Glu	Thr	His
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Lys	Ala	Met	Ile	Leu	Gln	Leu	Asn	Pro	Ser	Glu	Asn	Cys	Thr	Trp
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Thr	Ile	Glu	Arg	Pro	Glu	Asn	Lys	Ser	Ile	Arg	Ile	Ile	Phe	Ser
				65					70					75

Tyr	Val	Gln	Leu	Asp	Pro	Asp	Gly	Ser	Cys	Glu	Ser	Glu	Asn	Ile	
				80					85					90	
Lys	Val	Phe	Asp	Gly	Thr	Ser	Ser	Asn	Gly	Pro	Leu	Leu	Gly	Gln	
				95					100					105	
Val	Cys	Ser	Lys	Asn	Asp	Tyr	Val	Pro	Val	Phe	Glu	Ser	Ser	Ser	
				110					115					120	
Ser	Thr	Leu	Thr	Phe	Gln	Ile	Val	Thr	Asp	Ser	Ala	Arg	Ile	Gln	
				125					130					135	
Arg	Thr	Val	Phe	Val	Phe	Tyr	Tyr	Phe	Phe	Ser	Pro	Asn	Ile	Ser	
				140					145					150	
Ile	Pro	Asn	Cys	Gly	Gly	Tyr	Leu	Asp	Thr	Leu	Glu	Gly	Ser	Phe	
				155					160					165	
Thr	Ser	Pro	Asn	Tyr	Pro	Lys	Pro	His	Pro	Glu	Leu	Ala	Tyr	Cys	
				170					175					180	
Val	Trp	His	Ile	Gln	Val	Glu	Lys	Asp	Tyr	Lys	Ile	Lys	Leu	Asn	
				185					190					195	
Phe	Lys	Glu	Ile	Phe	Leu	Glu	Ile	Asp	Lys	Gln	Cys	Lys	Phe	Asp	
				200					205					210	
Phe	Leu	Ala	Ile	Tyr	Asp	Gly	Pro	Ser	Thr	Asn	Ser	Gly	Leu	Ile	
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Gly	Gln	Val	Cys	Gly	Arg	Val	Thr	Pro	Thr	Phe	Glu	Ser	Ser	Ser	
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Asn	Ser	Leu	Thr	Val	Val	Leu	Ser	Thr	Asp	Tyr	Ala	Asn	Ser	Tyr	
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Arg	Gly	Phe	Ser	Ala	Ser	Tyr	Thr	Ser	Ile	Tyr	Ala	Glu	Asn	Ile	
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Asn	Thr	Thr	Ser	Leu	Thr	Cys	Ser	Ser	Asp	Arg	Met	Arg	Val	Ile	
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Ile	Ser	Lys	Ser	Tyr	Leu	Glu	Ala	Phe	Asn	Ser	Asn	Gly	Asn	Asn	
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Leu	Gln	Leu	Lys	Asp	Pro	Thr	Cys	Arg	Pro	Lys	Leu	Ser	Asn	Val	
				305					310					315	
Val	Glu	Phe	Ser	Val	Pro	Leu	Asn	Gly	Cys	Gly	Thr	Ile	Arg	Lys	
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Val	Glu	Asp	Gln	Ser	Ile	Thr	Tyr	Thr	Asn	Ile	Ile	Thr	Phe	Ser	
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Ala	Ser	Ser	Thr	Ser	Glu	Val	Ile	Thr	Arg	Gln	Lys	Gln	Leu	Gln	
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Ile	Ile	Val	Lys	Cys	Glu	Met	Gly	His	Asn	Ser	Thr	Val	Glu	Ile	

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Gly Lys Tyr Asn	Thr Ser Met Ala Leu	Phe Glu Ser Asn Ser	Phe
	395	400	405
Glu Lys Thr Ile	Leu Glu Ser Pro Tyr	Tyr Val Asp Leu Asn	Gln
	410	415	420
Thr Leu Phe Val	Gln Val Ser Leu His	Thr Ser Asp Pro Asn	Leu
	425	430	435
Val Val Phe Leu	Asp Thr Cys Arg Ala	Ser Pro Thr Ser Asp	Phe
	440	445	450
Ala Ser Pro Thr	Tyr Asp Leu Ile Lys	Ser Gly Cys Ser Arg	Asp
	455	460	465
Glu Thr Cys Lys	Val Tyr Pro Leu Phe	Gly His Tyr Gly Arg	Phe
	470	475	480
Gln Phe Asn Ala	Phe Lys Phe Leu Arg	Ser Met Ser Ser Val	Tyr
	485	490	495
Leu Gln Cys Lys	Val Leu Ile Cys Asp	Ser Ser Asp His Gln	Ser
	500	505	510
Arg Cys Asn Gln	Gly Cys Val Ser Arg	Ser Lys Arg Asp Ile	Ser
	515	520	525
Ser Tyr Lys Trp	Lys Thr Asp Ser Ile	Ile Gly Pro Ile Arg	Leu
	530	535	540
Lys Arg Asp Arg	Ser Ala Ser Gly Asn	Ser Gly Phe Gln His	Glu
	545	550	555
Thr His Ala Glu	Glu Thr Pro Asn Gln	Pro Phe Asn Ser Val	His
	560	565	570
Leu Phe Ser Phe	Met Val Leu Ala Leu	Asn Val Val Thr Val	Ala
	575	580	585
Thr Ile Thr Val	Arg His Phe Val Asn	Gln Arg Ala Asp Tyr	Lys
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	605		

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 <211> 2933
 <212> DNA
 <213> Homo Sapien

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 <211> 723
 <212> PRT
 <213> Homo Sapien

<400> 346

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				20					25					30	
Glu	Phe	Val	Asn	Lys	Lys	Gly	Leu	Leu	Gly	Asn	Arg	Asn	Cys	Cys	
				35					40					45	
Arg	Gly	Gly	Ala	Gly	Pro	Pro	Pro	Cys	Ala	Cys	Arg	Thr	Phe	Phe	
				50					55					60	
Arg	Val	Cys	Leu	Lys	His	Tyr	Gln	Ala	Ser	Val	Ser	Pro	Glu	Pro	
				65					70					75	
Pro	Cys	Thr	Tyr	Gly	Ser	Ala	Val	Thr	Pro	Val	Leu	Gly	Val	Asp	
				80					85					90	
Ser	Phe	Ser	Leu	Pro	Asp	Gly	Gly	Gly	Ala	Asp	Ser	Ala	Phe	Ser	
				95					100					105	
Asn	Pro	Ile	Arg	Phe	Pro	Phe	Gly	Phe	Thr	Trp	Pro	Gly	Thr	Phe	
				110					115					120	
Ser	Leu	Ile	Ile	Glu	Ala	Leu	His	Thr	Asp	Ser	Pro	Asp	Asp	Leu	
				125					130					135	
Ala	Thr	Glu	Asn	Pro	Glu	Arg	Leu	Ile	Ser	Arg	Leu	Ala	Thr	Gln	
				140					145					150	
Arg	His	Leu	Thr	Val	Gly	Glu	Glu	Trp	Ser	Gln	Asp	Leu	His	Ser	
				155					160					165	
Ser	Gly	Arg	Thr	Asp	Leu	Lys	Tyr	Ser	Tyr	Arg	Phe	Val	Cys	Asp	
				170					175					180	
Glu	His	Tyr	Tyr	Gly	Glu	Gly	Cys	Ser	Val	Phe	Cys	Arg	Pro	Arg	
				185					190					195	
Asp	Asp	Ala	Phe	Gly	His	Phe	Thr	Cys	Gly	Glu	Arg	Gly	Glu	Lys	
				200					205					210	
Val	Cys	Asn	Pro	Gly	Trp	Lys	Gly	Pro	Tyr	Cys	Thr	Glu	Pro	Ile	
				215					220					225	
Cys	Leu	Pro	Gly	Cys	Asp	Glu	Gln	His	Gly	Phe	Cys	Asp	Lys	Pro	
				230					235					240	
Gly	Glu	Cys	Lys	Cys	Arg	Val	Gly	Trp	Gln	Gly	Arg	Tyr	Cys	Asp	
				245					250					255	
Glu	Cys	Ile	Arg	Tyr	Pro	Gly	Cys	Leu	His	Gly	Thr	Cys	Gln	Gln	

Leu	Met	Leu	Leu	Leu	Gly	Cys	Ala	Ala	Val	Val	Val	Cys	Val	Arg
				560					565					570
Leu	Arg	Leu	Gln	Lys	His	Arg	Pro	Pro	Ala	Asp	Pro	Cys	Arg	Gly
				575					580					585
Glu	Thr	Glu	Thr	Met	Asn	Asn	Leu	Ala	Asn	Cys	Gln	Arg	Glu	Lys
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Asp	Ile	Ser	Val	Ser	Ile	Ile	Gly	Ala	Thr	Gln	Ile	Lys	Asn	Thr
				605					610					615
Asn	Lys	Lys	Ala	Asp	Phe	His	Gly	Asp	His	Ser	Ala	Asp	Lys	Asn
				620					625					630
Gly	Phe	Lys	Ala	Arg	Tyr	Pro	Ala	Val	Asp	Tyr	Asn	Leu	Val	Gln
				635					640					645
Asp	Leu	Lys	Gly	Asp	Asp	Thr	Ala	Val	Arg	Asp	Ala	His	Ser	Lys
				650					655					660
Arg	Asp	Thr	Lys	Cys	Gln	Pro	Gln	Gly	Ser	Ser	Gly	Glu	Glu	Lys
				665					670					675
Gly	Thr	Pro	Thr	Thr	Leu	Arg	Gly	Gly	Glu	Ala	Ser	Glu	Arg	Lys
				680					685					690
Arg	Pro	Asp	Ser	Gly	Cys	Ser	Thr	Ser	Lys	Asp	Thr	Lys	Tyr	Gln
				695					700					705
Ser	Val	Tyr	Val	Ile	Ser	Glu	Glu	Lys	Asp	Glu	Cys	Val	Ile	Ala
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Thr	Glu	Val												

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 <211> 1685
 <212> DNA
 <213> Homo Sapien

<400> 347
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 <400> 348

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Ser	Gln	Pro	Trp	Thr	Ser	Asp	Glu	Thr	Val	Val	Ala	Gly	Gly	Thr	35	40	45	
Val	Val	Leu	Lys	Cys	Gln	Val	Lys	Asp	His	Glu	Asp	Ser	Ser	Leu	50	55	60	
Gln	Trp	Ser	Asn	Pro	Ala	Gln	Gln	Thr	Leu	Tyr	Phe	Gly	Glu	Lys	65	70	75	
Arg	Ala	Leu	Arg	Asp	Asn	Arg	Ile	Gln	Leu	Val	Thr	Ser	Thr	Pro	80	85	90	
His	Glu	Leu	Ser	Ile	Ser	Ile	Ser	Asn	Val	Ala	Leu	Ala	Asp	Glu	95	100	105	
Gly	Glu	Tyr	Thr	Cys	Ser	Ile	Phe	Thr	Met	Pro	Val	Arg	Thr	Ala	110	115	120	
Lys	Ser	Leu	Val	Thr	Val	Leu	Gly	Ile	Pro	Gln	Lys	Pro	Ile	Ile	125	130	135	
Thr	Gly	Tyr	Lys	Ser	Ser	Leu	Arg	Glu	Lys	Asp	Thr	Ala	Thr	Leu	140	145	150	
Asn	Cys	Gln	Ser	Ser	Gly	Ser	Lys	Pro	Ala	Ala	Arg	Leu	Thr	Trp	155	160	165	
Arg	Lys	Gly	Asp	Gln	Glu	Leu	His	Gly	Glu	Pro	Thr	Arg	Ile	Gln	170	175	180	
Glu	Asp	Pro	Asn	Gly	Lys	Thr	Phe	Thr	Val	Ser	Ser	Ser	Val	Thr	185	190	195	
Phe	Gln	Val	Thr	Arg	Glu	Asp	Asp	Gly	Ala	Ser	Ile	Val	Cys	Ser	200	205	210	
Val	Asn	His	Glu	Ser	Leu	Lys	Gly	Ala	Asp	Arg	Ser	Thr	Ser	Gln	215	220	225	
Arg	Ile	Glu	Val	Leu	Tyr	Thr	Pro	Thr	Ala	Met	Ile	Arg	Pro	Asp	230	235	240	
Pro	Pro	His	Pro	Arg	Glu	Gly	Gln	Lys	Leu	Leu	Leu	His	Cys	Glu	245	250	255	
Gly	Arg	Gly	Asn	Pro	Val	Pro	Gln	Gln	Tyr	Leu	Trp	Glu	Lys	Glu	260	265	270	
Gly	Ser	Val	Pro	Pro	Leu	Lys	Met	Thr	Gln	Glu	Ser	Ala	Leu	Ile	275	280	285	
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335	340	345
Ile Met Leu Ile Phe Leu Gly His Tyr	Leu Ile Arg His Lys Gly	
350	355	360
Thr Tyr Leu Thr His Glu Ala Lys Gly	Ser Asp Asp Ala Pro Asp	
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<210> 349

<211> 2479

<212> DNA

<213> Homo Sapien

<400> 349

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<210> 354

<211> 696

<212> PRT

<213> Homo Sapien

<400> 354

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Ala	Gly	Asn	Val	Thr	Gly	Asp	Val	Cys	Lys	Glu	Lys	Ile	Cys	Ser
				20					25					30

Cys	Asn	Glu	Ile	Glu	Gly	Asp	Leu	His	Val	Asp	Cys	Glu	Lys	Lys
				35					40					45

Gly	Phe	Thr	Ser	Leu	Gln	Arg	Phe	Thr	Ala	Pro	Thr	Ser	Gln	Phe
				50					55					60

Tyr	His	Leu	Phe	Leu	His	Gly	Asn	Ser	Leu	Thr	Arg	Leu	Phe	Pro
				65					70					75

Asn	Glu	Phe	Ala	Asn	Phe	Tyr	Asn	Ala	Val	Ser	Leu	His	Met	Glu
				80					85					90

Asn	Asn	Gly	Leu	His	Glu	Ile	Val	Pro	Gly	Ala	Phe	Leu	Gly	Leu
				95					100					105

Gln	Leu	Val	Lys	Arg	Leu	His	Ile	Asn	Asn	Asn	Lys	Ile	Lys	Ser
				110					115					120

Phe	Arg	Lys	Gln	Thr	Phe	Leu	Gly	Leu	Asp	Asp	Leu	Glu	Tyr	Leu		125	130	135
Gln	Ala	Asp	Phe	Asn	Leu	Leu	Arg	Asp	Ile	Asp	Pro	Gly	Ala	Phe		140	145	150
Gln	Asp	Leu	Asn	Lys	Leu	Glu	Val	Leu	Ile	Leu	Asn	Asp	Asn	Leu		155	160	165
Ile	Ser	Thr	Leu	Pro	Ala	Asn	Val	Phe	Gln	Tyr	Val	Pro	Ile	Thr		170	175	180
His	Leu	Asp	Leu	Arg	Gly	Asn	Arg	Leu	Lys	Thr	Leu	Pro	Tyr	Glu		185	190	195
Glu	Val	Leu	Glu	Gln	Ile	Pro	Gly	Ile	Ala	Glu	Ile	Leu	Leu	Glu		200	205	210
Asp	Asn	Pro	Trp	Asp	Cys	Thr	Cys	Asp	Leu	Leu	Ser	Leu	Lys	Glu		215	220	225
Trp	Leu	Glu	Asn	Ile	Pro	Lys	Asn	Ala	Leu	Ile	Gly	Arg	Val	Val		230	235	240
Cys	Glu	Ala	Pro	Thr	Arg	Leu	Gln	Gly	Lys	Asp	Leu	Asn	Glu	Thr		245	250	255
Thr	Glu	Gln	Asp	Leu	Cys	Pro	Leu	Lys	Asn	Arg	Val	Asp	Ser	Ser		260	265	270
Leu	Pro	Ala	Pro	Pro	Ala	Gln	Glu	Glu	Thr	Phe	Ala	Pro	Gly	Pro		275	280	285
Leu	Pro	Thr	Pro	Phe	Lys	Thr	Asn	Gly	Gln	Glu	Asp	His	Ala	Thr		290	295	300
Pro	Gly	Ser	Ala	Pro	Asn	Gly	Gly	Thr	Lys	Ile	Pro	Gly	Asn	Trp		305	310	315
Gln	Ile	Lys	Ile	Arg	Pro	Thr	Ala	Ala	Ile	Ala	Thr	Gly	Ser	Ser		320	325	330
Arg	Asn	Lys	Pro	Leu	Ala	Asn	Ser	Leu	Pro	Cys	Pro	Gly	Gly	Cys		335	340	345
Ser	Cys	Asp	His	Ile	Pro	Gly	Ser	Gly	Leu	Lys	Met	Asn	Cys	Asn		350	355	360
Asn	Arg	Asn	Val	Ser	Ser	Leu	Ala	Asp	Leu	Lys	Pro	Lys	Leu	Ser		365	370	375
Asn	Val	Gln	Glu	Leu	Phe	Leu	Arg	Asp	Asn	Lys	Ile	His	Ser	Ile		380	385	390
Arg	Lys	Ser	His	Phe	Val	Asp	Tyr	Lys	Asn	Leu	Ile	Leu	Leu	Asp		395	400	405
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<210> 355
<211> 2226
<212> DNA
<213> Homo Sapien

<400> 355
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cagttggggg gtccgtcggg agcgagggcg gaggggaagg gagggggaac 200
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<210> 356

<211> 490

<212> PRT

<213> Homo Sapien

<400> 356

Met	Arg	Pro	Ala	Phe	Ala	Leu	Cys	Leu	Leu	Trp	Gln	Ala	Leu	Trp
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Pro	Gly	Pro	Gly	Gly	Gly	Glu	His	Pro	Thr	Ala	Asp	Arg	Ala	Gly
				20					25					30
Cys	Ser	Ala	Ser	Gly	Ala	Cys	Tyr	Ser	Leu	His	His	Ala	Thr	Met
				35					40					45
Lys	Arg	Gln	Ala	Ala	Glu	Glu	Ala	Cys	Ile	Leu	Arg	Gly	Gly	Ala
				50					55					60
Leu	Ser	Thr	Val	Arg	Ala	Gly	Ala	Glu	Leu	Arg	Ala	Val	Leu	Ala
				65					70					75

Leu Leu Arg Ala Gly Pro Gly Pro Gly Gly Gly Ser Lys Asp Leu
 80 85 90
 Leu Phe Trp Val Ala Leu Glu Arg Arg Arg Ser His Cys Thr Leu
 95 100 105
 Glu Asn Glu Pro Leu Arg Gly Phe Ser Trp Leu Ser Ser Asp Pro
 110 115 120
 Gly Gly Leu Glu Ser Asp Thr Leu Gln Trp Val Glu Glu Pro Gln
 125 130 135
 Arg Ser Cys Thr Ala Arg Arg Cys Ala Val Leu Gln Ala Thr Gly
 140 145 150
 Gly Val Glu Pro Ala Gly Trp Lys Glu Met Arg Cys His Leu Arg
 155 160 165
 Ala Asn Gly Tyr Leu Cys Lys Tyr Gln Phe Glu Val Leu Cys Pro
 170 175 180
 Ala Pro Arg Pro Gly Ala Ala Ser Asn Leu Ser Tyr Arg Ala Pro
 185 190 195
 Phe Gln Leu His Ser Ala Ala Leu Asp Phe Ser Pro Pro Gly Thr
 200 205 210
 Glu Val Ser Ala Leu Cys Arg Gly Gln Leu Pro Ile Ser Val Thr
 215 220 225
 Cys Ile Ala Asp Glu Ile Gly Ala Arg Trp Asp Lys Leu Ser Gly
 230 235 240
 Asp Val Leu Cys Pro Cys Pro Gly Arg Tyr Leu Arg Ala Gly Lys
 245 250 255
 Cys Ala Glu Leu Pro Asn Cys Leu Asp Asp Leu Gly Gly Phe Ala
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 Cys Glu Cys Ala Thr Gly Phe Glu Leu Gly Lys Asp Gly Arg Ser
 275 280 285
 Cys Val Thr Ser Gly Glu Gly Gln Pro Thr Leu Gly Gly Thr Gly
 290 295 300
 Val Pro Thr Arg Arg Pro Pro Ala Thr Ala Thr Ser Pro Val Pro
 305 310 315
 Gln Arg Thr Trp Pro Ile Arg Val Asp Glu Lys Leu Gly Glu Thr
 320 325 330
 Pro Leu Val Pro Glu Gln Asp Asn Ser Val Thr Ser Ile Pro Glu
 335 340 345
 Ile Pro Arg Trp Gly Ser Gln Ser Thr Met Ser Thr Leu Gln Met
 350 355 360
 Ser Leu Gln Ala Glu Ser Lys Ala Thr Ile Thr Pro Ser Gly Ser

365	370	375
Val Ile Ser Lys Phe Asn Ser Thr Thr	Ser Ser Ala Thr Pro Gln	
380	385	390
Ala Phe Asp Ser Ser Ser Ala Val Val	Phe Ile Phe Val Ser Thr	
395	400	405
Ala Val Val Val Leu Val Ile Leu Thr	Met Thr Val Leu Gly Leu	
410	415	420
Val Lys Leu Cys Phe His Glu Ser Pro	Ser Ser Gln Pro Arg Lys	
425	430	435
Glu Ser Met Gly Pro Pro Gly Leu Glu	Ser Asp Pro Glu Pro Ala	
440	445	450
Ala Leu Gly Ser Ser Ser Ala His Cys	Thr Asn Asn Gly Val Lys	
455	460	465
Val Gly Asp Cys Asp Leu Arg Asp Arg	Ala Glu Gly Ala Leu Leu	
470	475	480
Ala Glu Ser Pro Leu Gly Ser Ser Asp	Ala	
485	490	

<210> 357
 <211> 3283
 <212> DNA
 <213> Homo Sapien

<400> 357
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<210> 358
 <211> 1049
 <212> PRT
 <213> Homo Sapien

<400> 358
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His Val Ile Val Asp Cys Thr Asp Lys His Leu Thr Glu Ile Pro		
50	55	60
Gly Gly Ile Pro Thr Asn Thr Thr Asn Leu Thr Leu Thr Ile Asn		
65	70	75
His Ile Pro Asp Ile Ser Pro Ala Ser Phe His Arg Leu Asp His		
80	85	90
Leu Val Glu Ile Asp Phe Arg Cys Asn Cys Val Pro Ile Pro Leu		
95	100	105
Gly Ser Lys Asn Asn Met Cys Ile Lys Arg Leu Gln Ile Lys Pro		
110	115	120
Arg Ser Phe Ser Gly Leu Thr Tyr Leu Lys Ser Leu Tyr Leu Asp		
125	130	135
Gly Asn Gln Leu Leu Glu Ile Pro Gln Gly Leu Pro Pro Ser Leu		
140	145	150
Gln Leu Leu Ser Leu Glu Ala Asn Asn Ile Phe Ser Ile Arg Lys		
155	160	165
Glu Asn Leu Thr Glu Leu Ala Asn Ile Glu Ile Leu Tyr Leu Gly		
170	175	180
Gln Asn Cys Tyr Tyr Arg Asn Pro Cys Tyr Val Ser Tyr Ser Ile		
185	190	195
Glu Lys Asp Ala Phe Leu Asn Leu Thr Lys Leu Lys Val Leu Ser		
200	205	210
Leu Lys Asp Asn Asn Val Thr Ala Val Pro Thr Val Leu Pro Ser		
215	220	225
Thr Leu Thr Glu Leu Tyr Leu Tyr Asn Asn Met Ile Ala Lys Ile		
230	235	240
Gln Glu Asp Asp Phe Asn Asn Leu Asn Gln Leu Gln Ile Leu Asp		
245	250	255
Leu Ser Gly Asn Cys Pro Arg Cys Tyr Asn Ala Pro Phe Pro Cys		
260	265	270
Ala Pro Cys Lys Asn Asn Ser Pro Leu Gln Ile Pro Val Asn Ala		
275	280	285
Phe Asp Ala Leu Thr Glu Leu Lys Val Leu Arg Leu His Ser Asn		
290	295	300
Ser Leu Gln His Val Pro Pro Arg Trp Phe Lys Asn Ile Asn Lys		
305	310	315

Leu	Gln	Glu	Leu	Asp	Leu	Ser	Gln	Asn	Phe	Leu	Ala	Lys	Glu	Ile	320	325	330
Gly	Asp	Ala	Lys	Phe	Leu	His	Phe	Leu	Pro	Ser	Leu	Ile	Gln	Leu	335	340	345
Asp	Leu	Ser	Phe	Asn	Phe	Glu	Leu	Gln	Val	Tyr	Arg	Ala	Ser	Met	350	355	360
Asn	Leu	Ser	Gln	Ala	Phe	Ser	Ser	Leu	Lys	Ser	Leu	Lys	Ile	Leu	365	370	375
Arg	Ile	Arg	Gly	Tyr	Val	Phe	Lys	Glu	Leu	Lys	Ser	Phe	Asn	Leu	380	385	390
Ser	Pro	Leu	His	Asn	Leu	Gln	Asn	Leu	Glu	Val	Leu	Asp	Leu	Gly	395	400	405
Thr	Asn	Phe	Ile	Lys	Ile	Ala	Asn	Leu	Ser	Met	Phe	Lys	Gln	Phe	410	415	420
Lys	Arg	Leu	Lys	Val	Ile	Asp	Leu	Ser	Val	Asn	Lys	Ile	Ser	Pro	425	430	435
Ser	Gly	Asp	Ser	Ser	Glu	Val	Gly	Phe	Cys	Ser	Asn	Ala	Arg	Thr	440	445	450
Ser	Val	Glu	Ser	Tyr	Glu	Pro	Gln	Val	Leu	Glu	Gln	Leu	His	Tyr	455	460	465
Phe	Arg	Tyr	Asp	Lys	Tyr	Ala	Arg	Ser	Cys	Arg	Phe	Lys	Asn	Lys	470	475	480
Glu	Ala	Ser	Phe	Met	Ser	Val	Asn	Glu	Ser	Cys	Tyr	Lys	Tyr	Gly	485	490	495
Gln	Thr	Leu	Asp	Leu	Ser	Lys	Asn	Ser	Ile	Phe	Phe	Val	Lys	Ser	500	505	510
Ser	Asp	Phe	Gln	His	Leu	Ser	Phe	Leu	Lys	Cys	Leu	Asn	Leu	Ser	515	520	525
Gly	Asn	Leu	Ile	Ser	Gln	Thr	Leu	Asn	Gly	Ser	Glu	Phe	Gln	Pro	530	535	540
Leu	Ala	Glu	Leu	Arg	Tyr	Leu	Asp	Phe	Ser	Asn	Asn	Arg	Leu	Asp	545	550	555
Leu	Leu	His	Ser	Thr	Ala	Phe	Glu	Glu	Leu	His	Lys	Leu	Glu	Val	560	565	570
Leu	Asp	Ile	Ser	Ser	Asn	Ser	His	Tyr	Phe	Gln	Ser	Glu	Gly	Ile	575	580	585
Thr	His	Met	Leu	Asn	Phe	Thr	Lys	Asn	Leu	Lys	Val	Leu	Gln	Lys	590	595	600
Leu	Met	Met	Asn	Asp	Asn	Asp	Ile	Ser	Ser	Ser	Thr	Ser	Arg	Thr			

Asp	Pro	Ala	Val	Thr	Glu	Trp	Val	Leu	Ala	Glu	Leu	Val	Ala	Lys	905	910	915
Leu	Glu	Asp	Pro	Arg	Glu	Lys	His	Phe	Asn	Leu	Cys	Leu	Glu	Glu	920	925	930
Arg	Asp	Trp	Leu	Pro	Gly	Gln	Pro	Val	Leu	Glu	Asn	Leu	Ser	Gln	935	940	945
Ser	Ile	Gln	Leu	Ser	Lys	Lys	Thr	Val	Phe	Val	Met	Thr	Asp	Lys	950	955	960
Tyr	Ala	Lys	Thr	Glu	Asn	Phe	Lys	Ile	Ala	Phe	Tyr	Leu	Ser	His	965	970	975
Gln	Arg	Leu	Met	Asp	Glu	Lys	Val	Asp	Val	Ile	Ile	Leu	Ile	Phe	980	985	990
Leu	Glu	Lys	Pro	Phe	Gln	Lys	Ser	Lys	Phe	Leu	Gln	Leu	Arg	Lys	995	1000	1005
Arg	Leu	Cys	Gly	Ser	Ser	Val	Leu	Glu	Trp	Pro	Thr	Asn	Pro	Gln	1010	1015	1020
Ala	His	Pro	Tyr	Phe	Trp	Gln	Cys	Leu	Lys	Asn	Ala	Leu	Ala	Thr	1025	1030	1035
Asp	Asn	His	Val	Ala	Tyr	Ser	Gln	Val	Phe	Lys	Glu	Thr	Val		1040	1045	

<210> 359

<211> 1875

<212> DNA

<213> Homo Sapien

<400> 359

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<210> 360

<211> 463

<212> PRT

<213> Homo Sapien

<400> 360

Met	His	Gly	Ser	Cys	Ser	Phe	Leu	Met	Leu	Leu	Leu	Pro	Leu	Leu	
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Leu	Leu	Leu	Val	Ala	Thr	Thr	Gly	Pro	Val	Gly	Ala	Leu	Thr	Asp	
				20					25					30	
Glu	Glu	Lys	Arg	Leu	Met	Val	Glu	Leu	His	Asn	Leu	Tyr	Arg	Ala	
				35					40					45	
Gln	Val	Ser	Pro	Thr	Ala	Ser	Asp	Met	Leu	His	Met	Arg	Trp	Asp	
				50					55					60	
Glu	Glu	Leu	Ala	Ala	Phe	Ala	Lys	Ala	Tyr	Ala	Arg	Gln	Cys	Val	
				65					70					75	
Trp	Gly	His	Asn	Lys	Glu	Arg	Gly	Arg	Arg	Gly	Glu	Asn	Leu	Phe	
				80					85					90	
Ala	Ile	Thr	Asp	Glu	Gly	Met	Asp	Val	Pro	Leu	Ala	Met	Glu	Glu	
				95					100					105	
Trp	His	His	Glu	Arg	Glu	His	Tyr	Asn	Leu	Ser	Ala	Ala	Thr	Cys	
				110					115					120	
Ser	Pro	Gly	Gln	Met	Cys	Gly	His	Tyr	Thr	Gln	Val	Val	Trp	Ala	
				125					130					135	
Lys	Thr	Glu	Arg	Ile	Gly	Cys	Gly	Ser	His	Phe	Cys	Glu	Lys	Leu	
				140					145					150	
Gln	Gly	Val	Glu	Glu	Thr	Asn	Ile	Glu	Leu	Leu	Val	Cys	Asn	Tyr	
				155					160					165	
Glu	Pro	Pro	Gly	Asn	Val	Lys	Gly	Lys	Arg	Pro	Tyr	Gln	Glu	Gly	
				170					175					180	
Thr	Pro	Cys	Ser	Gln	Cys	Pro	Ser	Gly	Tyr	His	Cys	Lys	Asn	Ser	
				185					190					195	
Leu	Cys	Glu	Pro	Ile	Gly	Ser	Pro	Glu	Asp	Ala	Gln	Asp	Leu	Pro	
				200					205					210	
Tyr	Leu	Val	Thr	Glu	Ala	Pro	Ser	Phe	Arg	Ala	Thr	Glu	Ala	Ser	
				215					220					225	
Asp	Ser	Arg	Lys	Met	Gly	Thr	Pro	Ser	Ser	Leu	Ala	Thr	Gly	Ile	
				230					235					240	
Pro	Ala	Phe	Leu	Val	Thr	Glu	Val	Ser	Gly	Ser	Leu	Ala	Thr	Lys	
				245					250					255	
Ala	Leu	Pro	Ala	Val	Glu	Thr	Gln	Ala	Pro	Thr	Ser	Leu	Ala	Thr	
				260					265					270	
Lys	Asp	Pro	Pro	Ser	Met	Ala	Thr	Glu	Ala	Pro	Pro	Cys	Val	Thr	
				275					280					285	

Thr	Glu	Val	Pro	Ser	Ile	Leu	Ala	Ala	His	Ser	Leu	Pro	Ser	Leu	
				290					295					300	
Asp	Glu	Glu	Pro	Val	Thr	Phe	Pro	Lys	Ser	Thr	His	Val	Pro	Ile	
				305					310					315	
Pro	Lys	Ser	Ala	Asp	Lys	Val	Thr	Asp	Lys	Thr	Lys	Val	Pro	Ser	
				320					325					330	
Arg	Ser	Pro	Glu	Asn	Ser	Leu	Asp	Pro	Lys	Met	Ser	Leu	Thr	Gly	
				335					340					345	
Ala	Arg	Glu	Leu	Leu	Pro	His	Ala	Gln	Glu	Glu	Ala	Glu	Ala	Glu	
				350					355					360	
Ala	Glu	Leu	Pro	Pro	Ser	Ser	Glu	Val	Leu	Ala	Ser	Val	Phe	Pro	
				365					370					375	
Ala	Gln	Asp	Lys	Pro	Gly	Glu	Leu	Gln	Ala	Thr	Leu	Asp	His	Thr	
				380					385					390	
Gly	His	Thr	Ser	Ser	Lys	Ser	Leu	Pro	Asn	Phe	Pro	Asn	Thr	Ser	
				395					400					405	
Ala	Thr	Ala	Asn	Ala	Thr	Gly	Gly	Arg	Ala	Leu	Ala	Leu	Gln	Ser	
				410					415					420	
Ser	Leu	Pro	Gly	Ala	Glu	Gly	Pro	Asp	Lys	Pro	Ser	Val	Val	Ser	
				425					430					435	
Gly	Leu	Asn	Ser	Gly	Pro	Gly	His	Val	Trp	Gly	Pro	Leu	Leu	Gly	
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Leu	Leu	Leu	Leu	Pro	Pro	Leu	Val	Leu	Ala	Gly	Ile	Phe			
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<210> 361
 <211> 1377
 <212> DNA
 <213> Homo Sapien

<400> 361
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 gcgcgggggc tggagcacca ccaactggag ggtccggagt agcgagcgcc 150
 ccgaaggagg ccatcgggga gccgggaggg gggactgcga gaggaccccg 200
 gcgtccgggc tcccgtgccc agcgctatga ggccactcct cgtcctgctg 250
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 cagcctctgc ccggggcacc ccggccttcc aggcacgccg ggccaccatg 350
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ccggggcctgc cggggagtgc tcggtgcctc cgcgatccgc cttcagcgcc 550
aagcgctccg agagccgggt gcctccgccg tctgacgcac ccttgccctt 600
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<210> 362
 <211> 243
 <212> PRT
 <213> Homo Sapien

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<400> 362
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Ser Pro Pro Leu Asp Asp Asn Lys Ile Pro Ser Leu Cys Pro Gly
           20           25           30
His Pro Gly Leu Pro Gly Thr Pro Gly His His Gly Ser Gln Gly
           35           40           45
Leu Pro Gly Arg Asp Gly Arg Asp Gly Arg Asp Gly Ala Pro Gly
           50           55           60

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Ala Pro Gly Glu Lys Gly Glu Gly Gly Arg Pro Gly Leu Pro Gly
65 70 75

Pro Arg Gly Asp Pro Gly Pro Arg Gly Glu Ala Gly Pro Ala Gly
80 85 90

Pro Thr Gly Pro Ala Gly Glu Cys Ser Val Pro Pro Arg Ser Ala
95 100 105

Phe Ser Ala Lys Arg Ser Glu Ser Arg Val Pro Pro Pro Ser Asp
110 115 120

Ala Pro Leu Pro Phe Asp Arg Val Leu Val Asn Glu Gln Gly His
125 130 135

Tyr Asp Ala Val Thr Gly Lys Phe Thr Cys Gln Val Pro Gly Val
140 145 150

Tyr Tyr Phe Ala Val His Ala Thr Val Tyr Arg Ala Ser Leu Gln
155 160 165

Phe Asp Leu Val Lys Asn Gly Glu Ser Ile Ala Ser Phe Phe Gln
170 175 180

Phe Phe Gly Gly Trp Pro Lys Pro Ala Ser Leu Ser Gly Gly Ala
185 190 195

Met Val Arg Leu Glu Pro Glu Asp Gln Val Trp Val Gln Val Gly
200 205 210

Val Gly Asp Tyr Ile Gly Ile Tyr Ala Ser Ile Lys Thr Asp Ser
215 220 225

Thr Phe Ser Gly Phe Leu Val Tyr Ser Asp Trp His Ser Ser Pro
230 235 240

Val Phe Ala

<210> 363
<211> 1503
<212> DNA
<213> Homo Sapien

<400> 363
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cctgagcgac gctccccatg atgacgcccc cggaacttc cagtacgacc 200
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<210> 364

<211> 328

<212> PRT

<213> Homo Sapien

<400> 364

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His Gly Ala Gln Gly Lys Pro Ser Pro Asp Ala Gly Pro His Gly

Asn Tyr Gly Glu Asp Leu Thr Arg His His Asp Glu Leu
 320 325

<210> 365
 <211> 1857
 <212> DNA
 <213> Homo Sapien

<400> 365
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 aaaaaaa 1857

<210> 366
 <211> 299
 <212> PRT
 <213> Homo Sapien

<400> 366
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 Val His Ser Ser Glu Pro Glu Val Arg Ile Pro Glu Asn Asn Pro
 35 40 45
 Val Lys Leu Ser Cys Ala Tyr Ser Gly Phe Ser Ser Pro Arg Val
 50 55 60
 Glu Trp Lys Phe Asp Gln Gly Asp Thr Thr Arg Leu Val Cys Tyr
 65 70 75
 Asn Asn Lys Ile Thr Ala Ser Tyr Glu Asp Arg Val Thr Phe Leu
 80 85 90
 Pro Thr Gly Ile Thr Phe Lys Ser Val Thr Arg Glu Asp Thr Gly
 95 100 105
 Thr Tyr Thr Cys Met Val Ser Glu Glu Gly Gly Asn Ser Tyr Gly
 110 115 120
 Glu Val Lys Val Lys Leu Ile Val Leu Val Pro Pro Ser Lys Pro
 125 130 135

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<210> 368

<211> 640

<212> PRT

<213> Homo Sapien

<400> 368

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Pro	Arg	Phe	Asn	Arg	Ala	Leu	Phe	Asp	Pro	Leu	Leu	Val	Val	Leu
			20						25					30
Leu	Ala	Leu	Gln	Leu	Leu	Val	Val	Ala	Gly	Leu	Val	Arg	Ala	Gln
			35						40					45
Thr	Cys	Pro	Ser	Val	Cys	Ser	Cys	Ser	Asn	Gln	Phe	Ser	Lys	Val
			50						55					60

Ile Cys Val Arg Lys Asn Leu Arg Glu Val Pro Asp Gly Ile Ser	65	70	75
Thr Asn Thr Arg Leu Leu Asn Leu His Glu Asn Gln Ile Gln Ile	80	85	90
Ile Lys Val Asn Ser Phe Lys His Leu Arg His Leu Glu Ile Leu	95	100	105
Gln Leu Ser Arg Asn His Ile Arg Thr Ile Glu Ile Gly Ala Phe	110	115	120
Asn Gly Leu Ala Asn Leu Asn Thr Leu Glu Leu Phe Asp Asn Arg	125	130	135
Leu Thr Thr Ile Pro Asn Gly Ala Phe Val Tyr Leu Ser Lys Leu	140	145	150
Lys Glu Leu Trp Leu Arg Asn Asn Pro Ile Glu Ser Ile Pro Ser	155	160	165
Tyr Ala Phe Asn Arg Ile Pro Ser Leu Arg Arg Leu Asp Leu Gly	170	175	180
Glu Leu Lys Arg Leu Ser Tyr Ile Ser Glu Gly Ala Phe Glu Gly	185	190	195
Leu Ser Asn Leu Arg Tyr Leu Asn Leu Ala Met Cys Asn Leu Arg	200	205	210
Glu Ile Pro Asn Leu Thr Pro Leu Ile Lys Leu Asp Glu Leu Asp	215	220	225
Leu Ser Gly Asn His Leu Ser Ala Ile Arg Pro Gly Ser Phe Gln	230	235	240
Gly Leu Met His Leu Gln Lys Leu Trp Met Ile Gln Ser Gln Ile	245	250	255
Gln Val Ile Glu Arg Asn Ala Phe Asp Asn Leu Gln Ser Leu Val	260	265	270
Glu Ile Asn Leu Ala His Asn Asn Leu Thr Leu Leu Pro His Asp	275	280	285
Leu Phe Thr Pro Leu His His Leu Glu Arg Ile His Leu His His	290	295	300
Asn Pro Trp Asn Cys Asn Cys Asp Ile Leu Trp Leu Ser Trp Trp	305	310	315
Ile Lys Asp Met Ala Pro Ser Asn Thr Ala Cys Cys Ala Arg Cys	320	325	330
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<211> 642

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<213> Homo Sapien

<400> 370

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Ala	Gln	Ser	Arg	Val	Leu	Leu	Leu	Leu	Leu	Leu	Leu	Pro	Pro	Gln
			35						40					45

Leu	His	Leu	Gly	Pro	Val	Leu	Ala	Val	Arg	Ala	Pro	Gly	Phe	Gly
			50						55					60

Arg	Ser	Gly	Gly	His	Ser	Leu	Ser	Pro	Glu	Glu	Asn	Glu	Phe	Ala
			65						70					75

Glu	Glu	Glu	Pro	Val	Leu	Val	Leu	Ser	Pro	Glu	Glu	Pro	Gly	Pro
			80						85					90

Gly	Pro	Ala	Ala	Val	Ser	Cys	Pro	Arg	Asp	Cys	Ala	Cys	Ser	Gln
			95						100					105

Glu	Gly	Val	Val	Asp	Cys	Gly	Gly	Ile	Asp	Leu	Arg	Glu	Phe	Pro
			110						115					120

Gly	Asp	Leu	Pro	Glu	His	Thr	Asn	His	Leu	Ser	Leu	Gln	Asn	Asn
			125						130					135

Gln	Leu	Glu	Lys	Ile	Tyr	Pro	Glu	Glu	Leu	Ser	Arg	Leu	His	Arg
			140						145					150

Leu	Glu	Thr	Leu	Asn	Leu	Gln	Asn	Asn	Arg	Leu	Thr	Ser	Arg	Gly	155	160	165
Leu	Pro	Glu	Lys	Ala	Phe	Glu	His	Leu	Thr	Asn	Leu	Asn	Tyr	Leu	170	175	180
Tyr	Leu	Ala	Asn	Asn	Lys	Leu	Thr	Leu	Ala	Pro	Arg	Phe	Leu	Pro	185	190	195
Asn	Ala	Leu	Ile	Ser	Val	Asp	Phe	Ala	Ala	Asn	Tyr	Leu	Thr	Lys	200	205	210
Ile	Tyr	Gly	Leu	Thr	Phe	Gly	Gln	Lys	Pro	Asn	Leu	Arg	Ser	Val	215	220	225
Tyr	Leu	His	Asn	Asn	Lys	Leu	Ala	Asp	Ala	Gly	Leu	Pro	Asp	Asn	230	235	240
Met	Phe	Asn	Gly	Ser	Ser	Asn	Val	Glu	Val	Leu	Ile	Leu	Ser	Ser	245	250	255
Asn	Phe	Leu	Arg	His	Val	Pro	Lys	His	Leu	Pro	Pro	Ala	Leu	Tyr	260	265	270
Lys	Leu	His	Leu	Lys	Asn	Asn	Lys	Leu	Glu	Lys	Ile	Pro	Pro	Gly	275	280	285
Ala	Phe	Ser	Glu	Leu	Ser	Ser	Leu	Arg	Glu	Leu	Tyr	Leu	Gln	Asn	290	295	300
Asn	Tyr	Leu	Thr	Asp	Glu	Gly	Leu	Asp	Asn	Glu	Thr	Phe	Trp	Lys	305	310	315
Leu	Ser	Ser	Leu	Glu	Tyr	Leu	Asp	Leu	Ser	Ser	Asn	Asn	Leu	Ser	320	325	330
Arg	Val	Pro	Ala	Gly	Leu	Pro	Arg	Ser	Leu	Val	Leu	Leu	His	Leu	335	340	345
Glu	Lys	Asn	Ala	Ile	Arg	Ser	Val	Asp	Ala	Asn	Val	Leu	Thr	Pro	350	355	360
Ile	Arg	Ser	Leu	Glu	Tyr	Leu	Leu	Leu	His	Ser	Asn	Gln	Leu	Arg	365	370	375
Glu	Gln	Gly	Ile	His	Pro	Leu	Ala	Phe	Gln	Gly	Leu	Lys	Arg	Leu	380	385	390
His	Thr	Val	His	Leu	Tyr	Asn	Asn	Ala	Leu	Glu	Arg	Val	Pro	Ser	395	400	405
Gly	Leu	Pro	Arg	Arg	Val	Arg	Thr	Leu	Met	Ile	Leu	His	Asn	Gln	410	415	420
Ile	Thr	Gly	Ile	Gly	Arg	Glu	Asp	Phe	Ala	Thr	Thr	Tyr	Phe	Leu	425	430	435
Glu	Glu	Leu	Asn	Leu	Ser	Tyr	Asn	Arg	Ile	Thr	Ser	Pro	Gln	Val			

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515	520	525
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Leu Tyr Leu Gln Asn Asn Lys Ile Ser	Ala Val Pro Ala Asn Ala	
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Phe Asp Ser Thr Pro Asn Leu Lys Gly	Ile Phe Leu Arg Phe Asn	
575	580	585
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590	595	600
Lys His Leu Gln Val Leu Asp Ile Glu	Gly Asn Leu Glu Phe Gly	
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 agccagagcc tgatgctgga gctgcgagag caggaccagg tgtgggtacg 1050
 cctctacaag ggcgaacgtg agaacgccat cttcagcgag gagctggaca 1100
 cctacatcac cttcagtggc tacctgggtc agcacgccac cgagccctag 1150
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 gcattcagtg agacgccctg cacacacaga aagccaaagc gatcggtgct 1300
 cccagatccc gcagcctctg gagagagctg acggcagatg aaatcaccag 1350
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 cacatcctca agtgaccccg cacggcgaga cgcgggtggc ggcagggcgt 1450
 cccaggggtg ggcaccgcgg ctccagtcct tggaaataat taggcaaatt 1500
 ctaaagggtct caaaaggagc aaagtaaacc gtggaggaca aagaaaaggg 1550
 ttgttatattt tgtctttcca gccagcctgc tggctcccaa gagagaggcc 1600
 ttttcagttg agactctgct taagagaaga tccaaagtta aagctctggg 1650
 gtcagggggg gggccggggg caggaaacta cctctggctt aattctttta 1700
 agccacgtag gaactttctt gagggatagg tggaccctga catccctgtg 1750

Pro	Pro	Asp	His	Ala	Glu	Arg	Ala	Glu	Glu	Gln	His	Glu	Lys	Tyr	50	55	60
Arg	Pro	Ser	Gln	Asp	Gln	Gly	Leu	Pro	Ala	Ser	Arg	Cys	Leu	Arg	65	70	75
Cys	Cys	Asp	Pro	Gly	Thr	Ser	Met	Tyr	Pro	Ala	Thr	Ala	Val	Pro	80	85	90
Gln	Ile	Asn	Ile	Thr	Ile	Leu	Lys	Gly	Glu	Lys	Gly	Asp	Arg	Gly	95	100	105
Asp	Arg	Gly	Leu	Gln	Gly	Lys	Tyr	Gly	Lys	Thr	Gly	Ser	Ala	Gly	110	115	120
Ala	Arg	Gly	His	Thr	Gly	Pro	Lys	Gly	Gln	Lys	Gly	Ser	Met	Gly	125	130	135
Ala	Pro	Gly	Glu	Arg	Cys	Lys	Ser	His	Tyr	Ala	Ala	Phe	Ser	Val	140	145	150
Gly	Arg	Lys	Lys	Pro	Met	His	Ser	Asn	His	Tyr	Tyr	Gln	Thr	Val	155	160	165
Ile	Phe	Asp	Thr	Glu	Phe	Val	Asn	Leu	Tyr	Asp	His	Phe	Asn	Met	170	175	180
Phe	Thr	Gly	Lys	Phe	Tyr	Cys	Tyr	Val	Pro	Gly	Leu	Tyr	Phe	Phe	185	190	195
Ser	Leu	Asn	Val	His	Thr	Trp	Asn	Gln	Lys	Glu	Thr	Tyr	Leu	His	200	205	210
Ile	Met	Lys	Asn	Glu	Glu	Glu	Val	Val	Ile	Leu	Phe	Ala	Gln	Val	215	220	225
Gly	Asp	Arg	Ser	Ile	Met	Gln	Ser	Gln	Ser	Leu	Met	Leu	Glu	Leu	230	235	240
Arg	Glu	Gln	Asp	Gln	Val	Trp	Val	Arg	Leu	Tyr	Lys	Gly	Glu	Arg	245	250	255
Glu	Asn	Ala	Ile	Phe	Ser	Glu	Glu	Leu	Asp	Thr	Tyr	Ile	Thr	Phe	260	265	270
Ser	Gly	Tyr	Leu	Val	Lys	His	Ala	Thr	Glu	Pro					275	280	

<210> 373

<211> 1572

<212> DNA

<213> Homo Sapien

<400> 373

cgagtggtg cgccaacgtg agaggaaacc cgtgcgcggc tgcgctttcc 50

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 tgctaggaca cattaggatt ggtcatggaa atagaatgca ccaccatgag 200
 catcatcacc tacaagctcc taacaaagaa gatatcttga aaatttcaga 250
 ggatgagcgc atggagctca gtaagagctt tcgagtatac tgtattatcc 300
 ttgtaaaacc caaagatgtg agtctttggg ctgcagtaaa ggagacttgg 350
 accaaacact gtgacaaagc agagttcttc agttctgaaa atgttaaagt 400
 gtttgagtca attaatatgg acacaaatga catgtgggta atgatgagaa 450
 aagcttacia atacgccttt gataagtata gagaccaata caactgggtc 500
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 gtagaatcaa tgaaaagact taacagcctt ctcaatatcc cagaaaagtg 700
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 tttgctgatt ggtaaaaaa ttttaacagg tcttttagcgt tctaagatat 1400
 gcaaatgata tctctagtgt tgaatttgtg attaaagtaa aacttttagc 1450
 tgtgtgttcc ctttacttct aatactgatt tatgttctaa gcctccccaa 1500
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attaaagtga aagttgaaaa at 1572

<210> 374

<211> 318

<212> PRT

<213> Homo Sapien

<400> 374

Met Leu Ser Glu Ser Ser Ser Phe Leu Lys Gly Val Met Leu Gly
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Ser Ile Phe Cys Ala Leu Ile Thr Met Leu Gly His Ile Arg Ile
20 25 30

Gly His Gly Asn Arg Met His His His Glu His His His Leu Gln
35 40 45

Ala Pro Asn Lys Glu Asp Ile Leu Lys Ile Ser Glu Asp Glu Arg
50 55 60

Met Glu Leu Ser Lys Ser Phe Arg Val Tyr Cys Ile Ile Leu Val
65 70 75

Lys Pro Lys Asp Val Ser Leu Trp Ala Ala Val Lys Glu Thr Trp
80 85 90

Thr Lys His Cys Asp Lys Ala Glu Phe Phe Ser Ser Glu Asn Val
95 100 105

Lys Val Phe Glu Ser Ile Asn Met Asp Thr Asn Asp Met Trp Leu
110 115 120

Met Met Arg Lys Ala Tyr Lys Tyr Ala Phe Asp Lys Tyr Arg Asp
125 130 135

Gln Tyr Asn Trp Phe Phe Leu Ala Arg Pro Thr Thr Phe Ala Ile
140 145 150

Ile Glu Asn Leu Lys Tyr Phe Leu Leu Lys Lys Asp Pro Ser Gln
155 160 165

Pro Phe Tyr Leu Gly His Thr Ile Lys Ser Gly Asp Leu Glu Tyr
170 175 180

Val Gly Met Glu Gly Gly Ile Val Leu Ser Val Glu Ser Met Lys
185 190 195

Arg Leu Asn Ser Leu Leu Asn Ile Pro Glu Lys Cys Pro Glu Gln
200 205 210

Gly Gly Met Ile Trp Lys Ile Ser Glu Asp Lys Gln Leu Ala Val
215 220 225

Cys Leu Lys Tyr Ala Gly Val Phe Ala Glu Asn Ala Glu Asp Ala
230 235 240

Asp Gly Lys Asp Val Phe Asn Thr Lys Ser Val Gly Leu Ser Ile
245 250 255

Lys	Glu	Ala	Met	Thr	Tyr	His	Pro	Asn	Gln	Val	Val	Glu	Gly	Cys
				260					265					270
Cys	Ser	Asp	Met	Ala	Val	Thr	Phe	Asn	Gly	Leu	Thr	Pro	Asn	Gln
				275					280					285
Met	His	Val	Met	Met	Tyr	Gly	Val	Tyr	Arg	Leu	Arg	Ala	Phe	Gly
				290					295					300
His	Ile	Phe	Asn	Asp	Ala	Leu	Val	Phe	Leu	Pro	Pro	Asn	Gly	Ser
				305					310					315
Asp	Asn	Asp												

<210> 375
 <211> 1679
 <212> DNA
 <213> Homo Sapien

<400> 375
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 aaaaatgcac aattctatct cttgggcaat cttcacgggg ctggctgctc 200
 tgtgtctctt ccaaggagtg cccgtgcgca gcggagatgc caccttcccc 250
 aaagctatgg acaacgtgac ggtccggcag ggggagagcg ccacctcag 300
 gtgcactatt gacaaccggg tcaccgggt ggctggcta aaccgcagca 350
 ccctcctcta tgctgggaat gacaagtggg gcctggatcc tcgcgtggtc 400
 cttctgagca acacccaaac gcagtacagc atcgagatcc agaacgtgga 450
 tgtgtatgac gagggccctt acacctgctc ggtgcagaca gacaaccacc 500
 caaagacctc tagggccac ctcattgtgc aagtatctcc caaaattgta 550
 gagatttctt cagatatctc cattaatgaa gggaacaata ttagcctcac 600
 ctgcatagca actggtagac cagagcctac gggtacttgg agacacatct 650
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 ggcatcaccg gggagcagtc aggggactac gagtgcagtg cctccaatga 750
 cgtggccgcg cccgtggtac ggagagtaaa ggtcaccgtg aactatccac 800
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 aactgcagt gtgaagcctc agcagtcctc tcagcagaat tccagtggta 900
 caaggatgac aaaagactga ttgaaggaaa gaaaggggtg aaagtggaaa 950

acagaccttt cctctcaaaa ctcatcttct tcaatgtctc tgaacatgac 1000
 tatgggaact acatttgcgt ggctccaac aagctgggcc acaccaatgc 1050
 cagcatcatg ctatttggct caggcgccgt cagcgagggt agcaacggca 1100
 cgtcgaggag ggcaggctgc gtctggctgc tgctcttctt ggtcttgca 1150
 ctgcttctca aattttgatg tgagtgccac ttccccaccc gggaaaggct 1200
 gccgccacca ccaccaccaa cacaacagca atggcaacac cgacagcaac 1250
 caatcagata tatacaaag aaattagaag aaacacagcc tcatgggaca 1300
 gaaatttgag ggagggaac aaagaatact ttggggggaa aagagtttta 1350
 aaaaagaaat tgaaaattgc cttgcagata tttaggtaca atggagtttt 1400
 cttttcccaa acgggaagaa cacagcacac ccggcttgga cccactgcaa 1450
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 tctgcccaca gagtgcccc acgtggaaca ttctggagct ggccatccca 1550
 aattcaatca gtccatagag acgaacagaa tgagaccttc cggcccaagc 1600
 gtggcgctgc gggcactttg gtagactgtg ccaccacggc gtgtgttggtg 1650
 aaacgtgaaa taaaagagc aaaaaaaaa 1679

<210> 376

<211> 344

<212> PRT

<213> Homo Sapien

<400> 376

Met	Lys	Thr	Ile	Gln	Pro	Lys	Met	His	Asn	Ser	Ile	Ser	Trp	Ala
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Ile	Phe	Thr	Gly	Leu	Ala	Ala	Leu	Cys	Leu	Phe	Gln	Gly	Val	Pro
				20					25					30
Val	Arg	Ser	Gly	Asp	Ala	Thr	Phe	Pro	Lys	Ala	Met	Asp	Asn	Val
				35					40					45
Thr	Val	Arg	Gln	Gly	Glu	Ser	Ala	Thr	Leu	Arg	Cys	Thr	Ile	Asp
				50					55					60
Asn	Arg	Val	Thr	Arg	Val	Ala	Trp	Leu	Asn	Arg	Ser	Thr	Ile	Leu
				65					70					75
Tyr	Ala	Gly	Asn	Asp	Lys	Trp	Cys	Leu	Asp	Pro	Arg	Val	Val	Leu
				80					85					90
Leu	Ser	Asn	Thr	Gln	Thr	Gln	Tyr	Ser	Ile	Glu	Ile	Gln	Asn	Val
				95					100					105
Asp	Val	Tyr	Asp	Glu	Gly	Pro	Tyr	Thr	Cys	Ser	Val	Gln	Thr	Asp

110
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 120
 125
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 135
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 170
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 265
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 295
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 310
 315
 320
 325
 330
 335
 340

Asn	His	Pro	Lys	Thr	Ser	Arg	Val	His	Leu	Ile	Val	Gln	Val	Ser
				125					130					135
Pro	Lys	Ile	Val	Glu	Ile	Ser	Ser	Asp	Ile	Ser	Ile	Asn	Glu	Gly
				140					145					150
Asn	Asn	Ile	Ser	Leu	Thr	Cys	Ile	Ala	Thr	Gly	Arg	Pro	Glu	Pro
				155					160					165
Thr	Val	Thr	Trp	Arg	His	Ile	Ser	Pro	Lys	Ala	Val	Gly	Phe	Val
				170					175					180
Ser	Glu	Asp	Glu	Tyr	Leu	Glu	Ile	Gln	Gly	Ile	Thr	Arg	Glu	Gln
				185					190					195
Ser	Gly	Asp	Tyr	Glu	Cys	Ser	Ala	Ser	Asn	Asp	Val	Ala	Ala	Pro
				200					205					210
Val	Val	Arg	Arg	Val	Lys	Val	Thr	Val	Asn	Tyr	Pro	Pro	Tyr	Ile
				215					220					225
Ser	Glu	Ala	Lys	Gly	Thr	Gly	Val	Pro	Val	Gly	Gln	Lys	Gly	Thr
				230					235					240
Leu	Gln	Cys	Glu	Ala	Ser	Ala	Val	Pro	Ser	Ala	Glu	Phe	Gln	Trp
				245					250					255
Tyr	Lys	Asp	Asp	Lys	Arg	Leu	Ile	Glu	Gly	Lys	Lys	Gly	Val	Lys
				260					265					270
Val	Glu	Asn	Arg	Pro	Phe	Leu	Ser	Lys	Leu	Ile	Phe	Phe	Asn	Val
				275					280					285
Ser	Glu	His	Asp	Tyr	Gly	Asn	Tyr	Thr	Cys	Val	Ala	Ser	Asn	Lys
				290					295					300
Leu	Gly	His	Thr	Asn	Ala	Ser	Ile	Met	Leu	Phe	Gly	Pro	Gly	Ala
				305					310					315
Val	Ser	Glu	Val	Ser	Asn	Gly	Thr	Ser	Arg	Arg	Ala	Gly	Cys	Val
				320					325					330
Trp	Leu	Leu	Pro	Leu	Leu	Val	Leu	His	Leu	Leu	Leu	Lys	Phe	
				335					340					

<210> 377
 <211> 2110
 <212> DNA
 <213> Homo Sapien

<400> 377
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 caacaggtgc ttgctcgggg ctgaaggtga cagtgccatc acacactgtc 150

catggcgtca gaggtcaggc cctctaccta cccgtccact atggcttcca 200
 cactccagca tcagacatcc agatcatatg gctatttgag agaccccaca 250
 caatgcccaa atacttactg ggctctgtga ataagtctgt ggttcttgac 300
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 acattcaggg aaatggaact ctatctgcca gtcagaagat acaagtcacg 450
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 atcactatth ttgattatat ccatgtgtct tctcttctta tggaaaaaat 1150
 atcaacccta caaagttata aaacagaaac tagaaggcag gccagaaaca 1200
 gaatacagga aagctcaaac attttcaggc catgaagatg ctctggatga 1250
 cttcggaata tatgaatttg ttgcttttcc agatgtttct ggtgtttcca 1300
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 ttgcacagta cagtgtatga agttattcag cacatccctg cccagcagca 1400
 agaccatcca gagtgaactt tcatgggcta aacagtacat tcgagtgaaa 1450
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 aatcagtgaa gaaaccagga ccaacacctc ttactcatta ttcctttaca 1550
 tgcagaatag aggcatttat gcaaattgaa ctgcaggttt ttcagcatat 1600

acacaatgtc ttgtgcaaca gaaaaacatg ttgggggaaat attcctcagt 1650
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 aaaaaactat gccttctctt ttttttcaat caccagtagt atttttgaga 2000
 agacttgtga acacttaagg aaatgactat taaagtctta tttttatttt 2050
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 aaaaaaaaaa 2110

<210> 378

<211> 450

<212> PRT

<213> Homo Sapien

<400> 378

Met	Trp	Leu	Lys	Val	Phe	Thr	Thr	Phe	Leu	Ser	Phe	Ala	Thr	Gly
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Ala	Cys	Ser	Gly	Leu	Lys	Val	Thr	Val	Pro	Ser	His	Thr	Val	His
				20					25					30

Gly	Val	Arg	Gly	Gln	Ala	Leu	Tyr	Leu	Pro	Val	His	Tyr	Gly	Phe
				35					40					45

His	Thr	Pro	Ala	Ser	Asp	Ile	Gln	Ile	Ile	Trp	Leu	Phe	Glu	Arg
				50					55					60

Pro	His	Thr	Met	Pro	Lys	Tyr	Leu	Leu	Gly	Ser	Val	Asn	Lys	Ser
				65					70					75

Val	Val	Pro	Asp	Leu	Glu	Tyr	Gln	His	Lys	Phe	Thr	Met	Met	Pro
				80					85					90

Pro	Asn	Ala	Ser	Leu	Leu	Ile	Asn	Pro	Leu	Gln	Phe	Pro	Asp	Glu
				95					100					105

Gly	Asn	Tyr	Ile	Val	Lys	Val	Asn	Ile	Gln	Gly	Asn	Gly	Thr	Leu
				110					115					120

Ser	Ala	Ser	Gln	Lys	Ile	Gln	Val	Thr	Val	Asp	Asp	Pro	Val	Thr
				125					130					135

Lys	Pro	Val	Val	Gln	Ile	His	Pro	Pro	Ser	Gly	Ala	Val	Glu	Tyr
				140					145					150

Val Gly Asn Met Thr Leu Thr Cys His	Val Glu Gly Gly Thr Arg	155	160	165
Leu Ala Tyr Gln Trp Leu Lys Asn Gly Arg Pro Val His Thr Ser		170	175	180
Ser Thr Tyr Ser Phe Ser Pro Gln Asn Asn Thr Leu His Ile Ala		185	190	195
Pro Val Thr Lys Glu Asp Ile Gly Asn Tyr Ser Cys Leu Val Arg		200	205	210
Asn Pro Val Ser Glu Met Glu Ser Asp Ile Ile Met Pro Ile Ile		215	220	225
Tyr Tyr Gly Pro Tyr Gly Leu Gln Val Asn Ser Asp Lys Gly Leu		230	235	240
Lys Val Gly Glu Val Phe Thr Val Asp Leu Gly Glu Ala Ile Leu		245	250	255
Phe Asp Cys Ser Ala Asp Ser His Pro Pro Asn Thr Tyr Ser Trp		260	265	270
Ile Arg Arg Thr Asp Asn Thr Thr Tyr Ile Ile Lys His Gly Pro		275	280	285
Arg Leu Glu Val Ala Ser Glu Lys Val Ala Gln Lys Thr Met Asp		290	295	300
Tyr Val Cys Cys Ala Tyr Asn Asn Ile Thr Gly Arg Gln Asp Glu		305	310	315
Thr His Phe Thr Val Ile Ile Thr Ser Val Gly Leu Glu Lys Leu		320	325	330
Ala Gln Lys Gly Lys Ser Leu Ser Pro Leu Ala Ser Ile Thr Gly		335	340	345
Ile Ser Leu Phe Leu Ile Ile Ser Met Cys Leu Leu Phe Leu Trp		350	355	360
Lys Lys Tyr Gln Pro Tyr Lys Val Ile Lys Gln Lys Leu Glu Gly		365	370	375
Arg Pro Glu Thr Glu Tyr Arg Lys Ala Gln Thr Phe Ser Gly His		380	385	390
Glu Asp Ala Leu Asp Asp Phe Gly Ile Tyr Glu Phe Val Ala Phe		395	400	405
Pro Asp Val Ser Gly Val Ser Arg Ile Pro Ser Arg Ser Val Pro		410	415	420
Ala Ser Asp Cys Val Ser Gly Gln Asp Leu His Ser Thr Val Tyr		425	430	435
Glu Val Ile Gln His Ile Pro Ala Gln Gln Gln Asp His Pro Glu				

440

445

450

<210> 379

<211> 823

<212> DNA

<213> Homo Sapien

<400> 379

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 gcataattac gaggaagcag aacttctcca gaagcaagcg cacatgcgtt 200
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 aattaagggg ttacatccaa cccagagcg cttttgtggg cactgattgc 300
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 tagacatgta tagacacaaa aacagctgga gattgggctt aaaataccca 400
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 agaccttctc ctctgcaaa tag 823

<210> 380

<211> 155

<212> PRT

<213> Homo Sapien

<400> 380

Met Tyr Arg His Lys Asn Ser Trp Arg Leu Gly Leu Lys Tyr Pro
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 Pro Ser Ser Lys Glu Glu Thr Gln Val Pro Lys Thr Leu Ile Ser
 20 25 30
 Gly Leu Pro Gly Arg Lys Ser Ser Ser Arg Val Gly Glu Lys Leu
 35 40 45
 Gln Ser Ala His Lys Met Pro Leu Ser Pro Gly Leu Leu Leu Leu

50	55	60
Leu Leu Ser Gly	Ala Thr Ala Thr Ala	Ala Leu Pro Leu Glu Gly
65	70	75
Gly Pro Thr Gly	Arg Asp Ser Glu His	Met Gln Glu Ala Ala Gly
80	85	90
Ile Arg Lys Ser	Ser Leu Leu Thr Phe	Leu Ala Trp Trp Phe Glu
95	100	105
Trp Thr Ser Gln	Ala Ser Ala Gly Pro	Leu Ile Gly Glu Glu Ala
110	115	120
Arg Glu Val Ala	Arg Arg Gln Glu Gly	Ala Pro Pro Gln Gln Ser
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Ala Arg Arg Asp	Arg Met Pro Cys Arg	Asn Phe Phe Trp Lys Thr
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<210> 381

<211> 2236

<212> DNA

<213> Homo Sapien

<400> 381

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<211> 473

<212> PRT

<213> Homo Sapien

<400> 382

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				20					25					30
Cys	Val	Cys	Tyr	Asn	Glu	Pro	Lys	Val	Thr	Thr	Ser	Cys	Pro	Gln
				35					40					45
Gln	Gly	Leu	Gln	Ala	Val	Pro	Val	Gly	Ile	Pro	Ala	Ala	Ser	Gln
				50					55					60
Arg	Ile	Phe	Leu	His	Gly	Asn	Arg	Ile	Ser	His	Val	Pro	Ala	Ala
				65					70					75
Ser	Phe	Arg	Ala	Cys	Arg	Asn	Leu	Thr	Ile	Leu	Trp	Leu	His	Ser
				80					85					90
Asn	Val	Leu	Ala	Arg	Ile	Asp	Ala	Ala	Ala	Phe	Thr	Gly	Leu	Ala
				95					100					105
Leu	Leu	Glu	Gln	Leu	Asp	Leu	Ser	Asp	Asn	Ala	Gln	Leu	Arg	Ser
				110					115					120
Val	Asp	Pro	Ala	Thr	Phe	His	Gly	Leu	Gly	Arg	Leu	His	Thr	Leu
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His	Leu	Asp	Arg	Cys	Gly	Leu	Gln	Glu	Leu	Gly	Pro	Gly	Leu	Phe
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Arg	Gly	Leu	Ala	Ala	Leu	Gln	Tyr	Leu	Tyr	Leu	Gln	Asp	Asn	Ala
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Leu	Gln	Ala	Leu	Pro	Asp	Asp	Thr	Phe	Arg	Asp	Leu	Gly	Asn	Leu
				170					175					180
Thr	His	Leu	Phe	Leu	His	Gly	Asn	Arg	Ile	Ser	Ser	Val	Pro	Glu
				185					190					195
Arg	Ala	Phe	Arg	Gly	Leu	His	Ser	Leu	Asp	Arg	Leu	Leu	Leu	His
				200					205					210
Gln	Asn	Arg	Val	Ala	His	Val	His	Pro	His	Ala	Phe	Arg	Asp	Leu
				215					220					225
Gly	Arg	Leu	Met	Thr	Leu	Tyr	Leu	Phe	Ala	Asn	Asn	Leu	Ser	Ala
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Leu	Pro	Thr	Glu	Ala	Leu	Ala	Pro	Leu	Arg	Ala	Leu	Gln	Tyr	Leu
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Leu	Trp	Ala	Trp	Leu	Gln	Lys	Phe	Arg	Gly	Ser	Ser	Ser	Glu	Val	
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Pro	Cys	Ser	Leu	Pro	Gln	Arg	Leu	Ala	Gly	Arg	Asp	Leu	Lys	Arg	
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Leu	Ala	Ala	Asn	Asp	Leu	Gln	Gly	Cys	Ala	Val	Ala	Thr	Gly	Pro	
				305					310					315	
Tyr	His	Pro	Ile	Trp	Thr	Gly	Arg	Ala	Thr	Asp	Glu	Glu	Pro	Leu	
				320					325					330	
Gly	Leu	Pro	Lys	Cys	Cys	Gln	Pro	Asp	Ala	Ala	Asp	Lys	Ala	Ser	
				335					340					345	
Val	Leu	Glu	Pro	Gly	Arg	Pro	Ala	Ser	Ala	Gly	Asn	Ala	Leu	Lys	
				350					355					360	
Gly	Arg	Val	Pro	Pro	Gly	Asp	Ser	Pro	Pro	Gly	Asn	Gly	Ser	Gly	
				365					370					375	
Pro	Arg	His	Ile	Asn	Asp	Ser	Pro	Phe	Gly	Thr	Leu	Pro	Gly	Ser	
				380					385					390	
Ala	Glu	Pro	Pro	Leu	Thr	Ala	Val	Arg	Pro	Glu	Gly	Ser	Glu	Pro	
				395					400					405	
Pro	Gly	Phe	Pro	Thr	Ser	Gly	Pro	Arg	Arg	Arg	Pro	Gly	Cys	Ser	
				410					415					420	
Arg	Lys	Asn	Arg	Thr	Arg	Ser	His	Cys	Arg	Leu	Gly	Gln	Ala	Gly	
				425					430					435	
Ser	Gly	Gly	Gly	Gly	Thr	Gly	Asp	Ser	Glu	Gly	Ser	Gly	Ala	Leu	
				440					445					450	
Pro	Ser	Leu	Thr	Cys	Ser	Leu	Thr	Pro	Leu	Gly	Leu	Ala	Leu	Val	
				455					460					465	
Leu	Trp	Thr	Val	Leu	Gly	Pro	Cys								
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<210> 383
 <211> 2336
 <212> DNA
 <213> Homo Sapien

<220>
 <221> unsure
 <222> 1620, 1673
 <223> unknown base

<400> 383
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<210> 384

<211> 211

<212> PRT

<213> Homo Sapien

<400> 384

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Ser	Leu	Ile	Gly	Ala	Leu	Ile	Pro	Glu	Pro	Glu	Val	Lys	Ile	Glu
			20						25					30

Val	Leu	Gln	Lys	Pro	Phe	Ile	Cys	His	Arg	Lys	Thr	Lys	Gly	Gly
			35						40					45

Asp	Leu	Met	Leu	Val	His	Tyr	Glu	Gly	Tyr	Leu	Glu	Lys	Asp	Gly
			50						55					60

Ser	Leu	Phe	His	Ser	Thr	His	Lys	His	Asn	Asn	Gly	Gln	Pro	Ile
			65						70					75

Trp	Phe	Thr	Leu	Gly	Ile	Leu	Glu	Ala	Leu	Lys	Gly	Trp	Asp	Gln
			80						85					90

Gly	Leu	Lys	Gly	Met	Cys	Val	Gly	Glu	Lys	Arg	Lys	Leu	Ile	Ile
				95					100					105
Pro	Pro	Ala	Leu	Gly	Tyr	Gly	Lys	Glu	Gly	Lys	Gly	Lys	Ile	Pro
				110					115					120
Pro	Glu	Ser	Thr	Leu	Ile	Phe	Asn	Ile	Asp	Leu	Leu	Glu	Ile	Arg
				125					130					135
Asn	Gly	Pro	Arg	Ser	His	Glu	Ser	Phe	Gln	Glu	Met	Asp	Leu	Asn
				140					145					150
Asp	Asp	Trp	Lys	Leu	Ser	Lys	Asp	Glu	Val	Lys	Ala	Tyr	Leu	Lys
				155					160					165
Lys	Glu	Phe	Glu	Lys	His	Gly	Ala	Val	Val	Asn	Glu	Ser	His	His
				170					175					180
Asp	Ala	Leu	Val	Glu	Asp	Ile	Phe	Asp	Lys	Glu	Asp	Glu	Asp	Lys
				185					190					195
Asp	Gly	Phe	Ile	Ser	Ala	Arg	Glu	Phe	Thr	Tyr	Lys	His	Asp	Glu
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<210> 385
 <211> 2749
 <212> DNA
 <213> Homo Sapien
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 <221> unsure
 <222> 1869, 1887
 <223> unknown base

<400> 385
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<210> 386

<211> 332

<212> PRT

<213> Homo Sapien

<400> 386

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Tyr	Glu	Ala	Leu	Glu	Gly	Pro	Glu	Glu	Ile	Ser	Gly	Phe	Glu	Gly
				20					25					30
Asp	Thr	Val	Ser	Leu	Gln	Cys	Thr	Tyr	Arg	Glu	Glu	Leu	Arg	Asp
				35					40					45
His	Arg	Lys	Tyr	Trp	Cys	Arg	Lys	Gly	Gly	Ile	Leu	Phe	Ser	Arg
				50					55					60
Cys	Ser	Gly	Thr	Ile	Tyr	Ala	Glu	Glu	Gly	Gln	Glu	Thr	Met	
				65					70					75
Lys	Gly	Arg	Val	Ser	Ile	Arg	Asp	Ser	Arg	Gln	Glu	Leu	Ser	Leu
				80					85					90
Ile	Val	Thr	Leu	Trp	Asn	Leu	Thr	Leu	Gln	Asp	Ala	Gly	Glu	Tyr
				95					100					105

Trp Cys Gly Val	Glu Lys Arg Gly Pro	Asp Glu Ser Leu Leu Ile
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Ser Leu Phe Val	Phe Pro Gly Pro Cys	Cys Pro Pro Ser Pro Ser
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Pro Thr Phe Gln	Pro Leu Ala Thr Thr	Arg Leu Gln Pro Lys Ala
140	145	150
Lys Ala Gln Gln	Thr Gln Pro Pro Gly	Leu Thr Ser Pro Gly Leu
155	160	165
Tyr Pro Ala Ala	Thr Thr Ala Lys Gln	Gly Lys Thr Gly Ala Glu
170	175	180
Ala Pro Pro Leu	Pro Gly Thr Ser Gln	Tyr Gly His Glu Arg Thr
185	190	195
Ser Gln Tyr Thr	Gly Thr Ser Pro His	Pro Ala Thr Ser Pro Pro
200	205	210
Ala Gly Ser Ser	Arg Pro Pro Met Gln	Leu Asp Ser Thr Ser Ala
215	220	225
Glu Asp Thr Ser	Pro Ala Leu Ser Ser	Gly Ser Ser Lys Pro Arg
230	235	240
Val Ser Ile Pro	Met Val Arg Ile Leu	Ala Pro Val Leu Val Leu
245	250	255
Leu Ser Leu Leu	Ser Ala Ala Gly Leu	Ile Ala Phe Cys Ser His
260	265	270
Leu Leu Leu Trp	Arg Lys Glu Ala Gln	Gln Ala Thr Glu Thr Gln
275	280	285
Arg Asn Glu Lys	Phe Trp Leu Ser Arg	Leu Thr Ala Glu Glu Lys
290	295	300
Glu Ala Pro Ser	Gln Ala Pro Glu Gly	Asp Val Ile Ser Met Pro
305	310	315
Pro Leu His Thr	Ser Glu Glu Glu Leu	Gly Phe Ser Lys Phe Val
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Ser Ala		

<210> 387

<211> 2458

<212> DNA

<213> Homo Sapien

<400> 387

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 <212> PRT
 <213> Homo Sapien

<400> 388
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 Val Thr Leu Pro Cys His His Gln Leu Gly Leu Pro Glu Lys Asp
 35 40 45
 Thr Leu Asp Ile Glu Trp Leu Leu Thr Asp Asn Glu Gly Asn Gln
 50 55 60
 Lys Val Val Ile Thr Tyr Ser Ser Arg His Val Tyr Asn Asn Leu
 65 70 75

Thr	Glu	Glu	Gln	Lys	Gly	Arg	Val	Ala	Phe	Ala	Ser	Asn	Phe	Leu	
				80					85					90	
Ala	Gly	Asp	Ala	Ser	Leu	Gln	Ile	Glu	Pro	Leu	Lys	Pro	Ser	Asp	
				95					100					105	
Glu	Gly	Arg	Tyr	Thr	Cys	Lys	Val	Lys	Asn	Ser	Gly	Arg	Tyr	Val	
				110					115					120	
Trp	Ser	His	Val	Ile	Leu	Lys	Val	Leu	Val	Arg	Pro	Ser	Lys	Pro	
				125					130					135	
Lys	Cys	Glu	Leu	Glu	Gly	Glu	Leu	Thr	Glu	Gly	Ser	Asp	Leu	Thr	
				140					145					150	
Leu	Gln	Cys	Glu	Ser	Ser	Ser	Gly	Thr	Glu	Pro	Ile	Val	Tyr	Tyr	
				155					160					165	
Trp	Gln	Arg	Ile	Arg	Glu	Lys	Glu	Gly	Glu	Asp	Glu	Arg	Leu	Pro	
				170					175					180	
Pro	Lys	Ser	Arg	Ile	Asp	Tyr	Asn	His	Pro	Gly	Arg	Val	Leu	Leu	
				185					190					195	
Gln	Asn	Leu	Thr	Met	Ser	Tyr	Ser	Gly	Leu	Tyr	Gln	Cys	Thr	Ala	
				200					205					210	
Gly	Asn	Glu	Ala	Gly	Lys	Glu	Ser	Cys	Val	Val	Arg	Val	Thr	Val	
				215					220					225	
Gln	Tyr	Val	Gln	Ser	Ile	Gly	Met	Val	Ala	Gly	Ala	Val	Thr	Gly	
				230					235					240	
Ile	Val	Ala	Gly	Ala	Leu	Leu	Ile	Phe	Leu	Leu	Val	Trp	Leu	Leu	
				245					250					255	
Ile	Arg	Arg	Lys	Asp	Lys	Glu	Arg	Tyr	Glu	Glu	Glu	Glu	Arg	Pro	
				260					265					270	
Asn	Glu	Ile	Arg	Glu	Asp	Ala	Glu	Ala	Pro	Lys	Ala	Arg	Leu	Val	
				275					280					285	
Lys	Pro	Ser	Ser	Ser	Ser	Ser	Gly	Ser	Arg	Ser	Ser	Arg	Ser	Gly	
				290					295					300	
Ser	Ser	Ser	Thr	Arg	Ser	Thr	Ala	Asn	Ser	Ala	Ser	Arg	Ser	Gln	
				305					310					315	
Arg	Thr	Leu	Ser	Thr	Asp	Ala	Ala	Pro	Gln	Pro	Gly	Leu	Ala	Thr	
				320					325					330	
Gln	Ala	Tyr	Ser	Leu	Val	Gly	Pro	Glu	Val	Arg	Gly	Ser	Glu	Pro	
				335					340					345	
Lys	Lys	Val	His	His	Ala	Asn	Leu	Thr	Lys	Ala	Glu	Thr	Thr	Pro	
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Ser	Met	Ile	Pro	Ser	Gln	Ser	Arg	Ala	Phe	Gln	Thr	Val			

<210> 389
 <211> 963
 <212> DNA
 <213> Homo Sapien

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 tgtgaccact ggactccctg cccatctgac acctatgcct acaggttact 250
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 tacttatggg agaacagctg ggaaatgttg ccagaggaat aaacattgcc 350
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 tggaactccc ttccgaaatt cagagagaaa agatcaacca ctctgatgct 650
 aagaacaaca gatattctgg ctggcctgca gagatccaga tagaaggctg 700
 catacccaaa gaacgaagct gacactgcag ggtcctgagt aaatgtgttc 750
 tgtataaaca aatgcagctg gaatcgctca agaattttat ttttctaaat 800
 ccaacagccc atatttgatg agtatttttg gtttggttga aaccaatgaa 850
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<210> 390
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<400> 390
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Leu Ile Pro Asp Ala Pro Leu Ser Ser Ala Ala Tyr Ser Ile Arg	35	40	45
Ser Ile Gly Glu Arg Pro Val Leu Lys Ala Pro Val Pro Lys Arg	50	55	60
Gln Lys Cys Asp His Trp Thr Pro Cys Pro Ser Asp Thr Tyr Ala	65	70	75
Tyr Arg Leu Leu Ser Gly Gly Gly Arg Ser Lys Tyr Ala Lys Ile	80	85	90
Cys Phe Glu Asp Asn Leu Leu Met Gly Glu Gln Leu Gly Asn Val	95	100	105
Ala Arg Gly Ile Asn Ile Ala Ile Val Asn Tyr Val Thr Gly Asn	110	115	120
Val Thr Ala Thr Arg Cys Phe Asp Met Tyr Glu Gly Asp Asn Ser	125	130	135
Gly Pro Met Thr Lys Phe Ile Gln Ser Ala Ala Pro Lys Ser Leu	140	145	150
Leu Phe Met Val Thr Tyr Asp Asp Gly Ser Thr Arg Leu Asn Asn	155	160	165
Asp Ala Lys Asn Ala Ile Glu Ala Leu Gly Ser Lys Glu Ile Arg	170	175	180
Asn Met Lys Phe Arg Ser Ser Trp Val Phe Ile Ala Ala Lys Gly	185	190	195
Leu Glu Leu Pro Ser Glu Ile Gln Arg Glu Lys Ile Asn His Ser	200	205	210
Asp Ala Lys Asn Asn Arg Tyr Ser Gly Trp Pro Ala Glu Ile Gln	215	220	225
Ile Glu Gly Cys Ile Pro Lys Glu Arg Ser	230	235	

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agcccagccc agccccgcgg gccggtcaca cgcgcagcca gccggccgcc 200
  
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 aaaaaaaaaa aaaaaaaaaa aa 3772

<210> 392

<211> 756

<212> PRT

<213> Homo Sapien

<400> 392

Met	Ser	Arg	Pro	Gly	Thr	Ala	Thr	Pro	Ala	Leu	Ala	Leu	Val	Leu
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				20					25					30
Glu	Asp	Pro	Asp	Tyr	Tyr	Gly	Gln	Glu	Ile	Trp	Ser	Arg	Glu	Pro
				35					40					45
Tyr	Tyr	Ala	Arg	Pro	Glu	Pro	Glu	Leu	Glu	Thr	Phe	Ser	Pro	Pro
				50					55					60
Leu	Pro	Ala	Gly	Pro	Gly	Glu	Glu	Trp	Glu	Arg	Arg	Pro	Gln	Glu
				65					70					75
Pro	Arg	Pro	Pro	Lys	Arg	Ala	Thr	Lys	Pro	Lys	Lys	Ala	Pro	Lys
				80					85					90
Arg	Glu	Lys	Ser	Ala	Pro	Glu	Pro	Pro	Pro	Pro	Gly	Lys	His	Ser
				95					100					105
Asn	Lys	Lys	Val	Met	Arg	Thr	Lys	Ser	Ser	Glu	Lys	Ala	Ala	Asn
				110					115					120

Gly	Tyr	Asp	Met	Gly	Ala	Thr	Arg	Cys	Asp	Phe	Thr	Leu	Ser	Lys
				710					715					720
Thr	Asn	Met	Ala	Arg	Ile	Arg	Glu	Ile	Met	Glu	Lys	Phe	Gly	Lys
				725					730					735
Gln	Pro	Val	Ser	Leu	Pro	Ala	Arg	Arg	Leu	Lys	Leu	Arg	Gly	Arg
				740					745					750
Lys	Arg	Arg	Gln	Arg	Gly									
				755										

<210> 393
 <211> 4313
 <212> DNA
 <213> Homo Sapien

<400> 393
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 tggccttgcc ttggggctct gcttgtttca taatcatcta actatgggac 200
 aaggttgtgc cggcagctct gggggaagga gcacggggct gatcaagcca 250
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<210> 394
 <211> 1184
 <212> PRT
 <213> Homo Sapien

<400> 394
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 20 25 30
 Thr Val Lys Tyr Gln Val Ser Glu Glu Val Pro Ser Gly Thr Val
 35 40 45
 Ile Gly Lys Leu Ser Gln Glu Leu Gly Arg Glu Glu Arg Arg Arg
 50 55 60
 Gln Ala Gly Ala Ala Phe Gln Val Leu Gln Leu Pro Gln Ala Leu
 65 70 75
 Pro Ile Gln Val Asp Ser Glu Glu Gly Leu Leu Ser Thr Gly Arg
 80 85 90
 Arg Leu Asp Arg Glu Gln Leu Cys Arg Gln Trp Asp Pro Cys Leu
 95 100 105
 Val Ser Phe Asp Val Leu Ala Thr Gly Asp Leu Ala Leu Ile His
 110 115 120
 Val Glu Ile Gln Val Leu Asp Ile Asn Asp His Gln Pro Arg Phe
 125 130 135
 Pro Lys Gly Glu Gln Glu Leu Glu Ile Ser Glu Ser Ala Ser Leu
 140 145 150
 Arg Thr Arg Ile Pro Leu Asp Arg Ala Leu Asp Pro Asp Thr Gly
 155 160 165
 Pro Asn Thr Leu His Thr Tyr Thr Leu Ser Pro Ser Glu His Phe

Glu	Val	Ser	Thr	Arg 470	Glu	Asn	Asn	Leu	Pro 475	Ser	Leu	His	Leu	Ile 480
Thr	Ile	Lys	Ala	His 485	Asp	Ala	Asp	Leu	Gly 490	Ile	Asn	Gly	Lys	Val 495
Ser	Tyr	Arg	Ile	Gln 500	Asp	Ser	Pro	Val	Ala 505	His	Leu	Val	Ala	Ile 510
Asp	Ser	Asn	Thr	Gly 515	Glu	Val	Thr	Ala	Gln 520	Arg	Ser	Leu	Asn	Tyr 525
Glu	Glu	Met	Ala	Gly 530	Phe	Glu	Phe	Gln	Val 535	Ile	Ala	Glu	Asp	Ser 540
Gly	Gln	Pro	Met	Leu 545	Ala	Ser	Ser	Val	Ser 550	Val	Trp	Val	Ser	Leu 555
Leu	Asp	Ala	Asn	Asp 560	Asn	Ala	Pro	Glu	Val 565	Val	Gln	Pro	Val	Leu 570
Ser	Asp	Gly	Lys	Ala 575	Ser	Leu	Ser	Val	Leu 580	Val	Asn	Ala	Ser	Thr 585
Gly	His	Leu	Leu	Val 590	Pro	Ile	Glu	Thr	Pro 595	Asn	Gly	Leu	Gly	Pro 600
Ala	Gly	Thr	Asp	Thr 605	Pro	Pro	Leu	Ala	Thr 610	His	Ser	Ser	Arg	Pro 615
Phe	Leu	Leu	Thr	Thr 620	Ile	Val	Ala	Arg	Asp 625	Ala	Asp	Ser	Gly	Ala 630
Asn	Gly	Glu	Pro	Leu 635	Tyr	Ser	Ile	Arg	Asn 640	Gly	Asn	Glu	Ala	His 645
Leu	Phe	Ile	Leu	Asn 650	Pro	His	Thr	Gly	Gln 655	Leu	Phe	Val	Asn	Val 660
Thr	Asn	Ala	Ser	Ser 665	Leu	Ile	Gly	Ser	Glu 670	Trp	Glu	Leu	Glu	Ile 675
Val	Val	Glu	Asp	Gln 680	Gly	Ser	Pro	Pro	Leu 685	Gln	Thr	Arg	Ala	Leu 690
Leu	Arg	Val	Met	Phe 695	Val	Thr	Ser	Val	Asp 700	His	Leu	Arg	Asp	Ser 705
Ala	Arg	Lys	Pro	Gly 710	Ala	Leu	Ser	Met	Ser 715	Met	Leu	Thr	Val	Ile 720
Cys	Leu	Ala	Val	Leu 725	Leu	Gly	Ile	Phe	Gly 730	Leu	Ile	Leu	Ala	Leu 735
Phe	Met	Ser	Ile	Cys 740	Arg	Thr	Glu	Lys	Lys 745	Asp	Asn	Arg	Ala	Tyr 750
Asn	Cys	Arg	Glu	Ala	Glu	Ser	Thr	Tyr	Arg	Gln	Gln	Pro	Lys	Arg

755	760	765
Pro Gln Lys His Ile Gln Lys Ala Asp	Ile His Leu Val Pro Val	
770	775	780
Leu Arg Gly Gln Ala Gly Glu Pro Cys	Glu Val Gly Gln Ser His	
785	790	795
Lys Asp Val Asp Lys Glu Ala Met Met	Glu Ala Gly Trp Asp Pro	
800	805	810
Cys Leu Gln Ala Pro Phe His Leu Thr	Pro Thr Leu Tyr Arg Thr	
815	820	825
Leu Arg Asn Gln Gly Asn Gln Gly Ala	Pro Ala Glu Ser Arg Glu	
830	835	840
Val Leu Gln Asp Thr Val Asn Leu Leu	Phe Asn His Pro Arg Gln	
845	850	855
Arg Asn Ala Ser Arg Glu Asn Leu Asn	Leu Pro Glu Pro Gln Pro	
860	865	870
Ala Thr Gly Gln Pro Arg Ser Arg Pro	Leu Lys Val Ala Gly Ser	
875	880	885
Pro Thr Gly Arg Leu Ala Gly Asp Gln	Gly Ser Glu Glu Ala Pro	
890	895	900
Gln Arg Pro Pro Ala Ser Ser Ala Thr	Leu Arg Arg Gln Arg His	
905	910	915
Leu Asn Gly Lys Val Ser Pro Glu Lys	Glu Ser Gly Pro Arg Gln	
920	925	930
Ile Leu Arg Ser Leu Val Arg Leu Ser	Val Ala Ala Phe Ala Glu	
935	940	945
Arg Asn Pro Val Glu Glu Leu Thr Val	Asp Ser Pro Pro Val Gln	
950	955	960
Gln Ile Ser Gln Leu Leu Ser Leu Leu	His Gln Gly Gln Phe Gln	
965	970	975
Pro Lys Pro Asn His Arg Gly Asn Lys	Tyr Leu Ala Lys Pro Gly	
980	985	990
Gly Ser Arg Ser Ala Ile Pro Asp Thr	Asp Gly Pro Ser Ala Arg	
995	1000	1005
Ala Gly Gly Gln Thr Asp Pro Glu Gln	Glu Glu Gly Pro Leu Asp	
1010	1015	1020
Pro Glu Glu Asp Leu Ser Val Lys Gln	Leu Leu Glu Glu Glu Leu	
1025	1030	1035
Ser Ser Leu Leu Asp Pro Ser Thr Gly	Leu Ala Leu Asp Arg Leu	
1040	1045	1050

Ser Ala Pro Asp Pro Ala Trp Met Ala Arg Leu Ser Leu Pro Leu
1055 1060 1065

Thr Thr Asn Tyr Arg Asp Asn Val Ile Ser Pro Asp Ala Ala Ala
1070 1075 1080

Thr Glu Glu Pro Arg Thr Phe Gln Thr Phe Gly Lys Ala Glu Ala
1085 1090 1095

Pro Glu Leu Ser Pro Thr Gly Thr Arg Leu Ala Ser Thr Phe Val
1100 1105 1110

Ser Glu Met Ser Ser Leu Leu Glu Met Leu Leu Glu Gln Arg Ser
1115 1120 1125

Ser Met Pro Val Glu Ala Ala Ser Glu Ala Leu Arg Arg Leu Ser
1130 1135 1140

Val Cys Gly Arg Thr Leu Ser Leu Asp Leu Ala Thr Ser Ala Ala
1145 1150 1155

Ser Gly Met Lys Val Gln Gly Asp Pro Gly Gly Lys Thr Gly Thr
1160 1165 1170

Glu Gly Lys Ser Arg Gly Ser Ser Ser Ser Arg Cys Leu
1175 1180

<210> 395
<211> 999
<212> DNA
<213> Homo Sapien

<400> 395
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cccagttaaa aggctccaga atcgtgtacc aggcagagaa ctgaagtact 100
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ctggaagacc tcaccatggg acgccccga cctcgtgcgg ccaagacgtg 200
gatgttcctg ctcttgctgg ggggagcctg ggcaggacac tccagggcac 250
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caagaaatac ctgtggttca gtccatccca caccctgct acaacagcag 500
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<210> 396

<211> 260

<212> PRT

<213> Homo Sapien

<400> 396

Met	Gly	Arg	Pro	Arg	Pro	Arg	Ala	Ala	Lys	Thr	Trp	Met	Phe	Leu	1	5	10	15
Leu	Leu	Leu	Gly	Gly	Ala	Trp	Ala	Gly	His	Ser	Arg	Ala	Gln	Glu	20	25	30	
Asp	Lys	Val	Leu	Gly	Gly	His	Glu	Cys	Gln	Pro	His	Ser	Gln	Pro	35	40	45	
Trp	Gln	Ala	Ala	Leu	Phe	Gln	Gly	Gln	Gln	Leu	Leu	Cys	Gly	Gly	50	55	60	
Val	Leu	Val	Gly	Gly	Asn	Trp	Val	Leu	Thr	Ala	Ala	His	Cys	Lys	65	70	75	
Lys	Pro	Lys	Tyr	Thr	Val	Arg	Leu	Gly	Asp	His	Ser	Leu	Gln	Asn	80	85	90	
Lys	Asp	Gly	Pro	Glu	Gln	Glu	Ile	Pro	Val	Val	Gln	Ser	Ile	Pro	95	100	105	
His	Pro	Cys	Tyr	Asn	Ser	Ser	Asp	Val	Glu	Asp	His	Asn	His	Asp	110	115	120	
Leu	Met	Leu	Leu	Gln	Leu	Arg	Asp	Gln	Ala	Ser	Leu	Gly	Ser	Lys	125	130	135	
Val	Lys	Pro	Ile	Ser	Leu	Ala	Asp	His	Cys	Thr	Gln	Pro	Gly	Gln	140	145	150	
Lys	Cys	Thr	Val	Ser	Gly	Trp	Gly	Thr	Val	Thr	Ser	Pro	Arg	Glu	155	160	165	
Asn	Phe	Pro	Asp	Thr	Leu	Asn	Cys	Ala	Glu	Val	Lys	Ile	Phe	Pro	170	175	180	
Gln	Lys	Lys	Cys	Glu	Asp	Ala	Tyr	Pro	Gly	Gln	Ile	Thr	Asp	Gly	185	190	195	

Met	Val	Cys	Ala	Gly	Ser	Ser	Lys	Gly	Ala	Asp	Thr	Cys	Gln	Gly	200	205	210
Asp	Ser	Gly	Gly	Pro	Leu	Val	Cys	Asp	Gly	Ala	Leu	Gln	Gly	Ile	215	220	225
Thr	Ser	Trp	Gly	Ser	Asp	Pro	Cys	Gly	Arg	Ser	Asp	Lys	Pro	Gly	230	235	240
Val	Tyr	Thr	Asn	Ile	Cys	Arg	Tyr	Leu	Asp	Trp	Ile	Lys	Lys	Ile	245	250	255
Ile	Gly	Ser	Lys	Gly											260		

<210> 397
 <211> 1312
 <212> DNA
 <213> Homo Sapien

<400> 397
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 aagtgagtgc tgggtcacc cccatccgca acgtcactgt ggccctacaag 200
 ttccacatgg ggctctatgg tgagactggg cggtcttttca ctgagagctg 250
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aaaaaaaaaa aa 1312

<210> 398

<211> 313

<212> PRT

<213> Homo Sapien

<400> 398

Met	Ser	Asp	Leu	Leu	Leu	Leu	Gly	Leu	Ile	Gly	Gly	Leu	Thr	Leu	
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Leu	Leu	Leu	Leu	Thr	Leu	Leu	Ala	Phe	Ala	Gly	Tyr	Ser	Gly	Leu	
				20					25					30	
Leu	Ala	Gly	Val	Glu	Val	Ser	Ala	Gly	Ser	Pro	Pro	Ile	Arg	Asn	
				35					40					45	
Val	Thr	Val	Ala	Tyr	Lys	Phe	His	Met	Gly	Leu	Tyr	Gly	Glu	Thr	
				50					55					60	
Gly	Arg	Leu	Phe	Thr	Glu	Ser	Cys	Ser	Ile	Ser	Pro	Lys	Leu	Arg	
				65					70					75	
Ser	Ile	Ala	Val	Tyr	Tyr	Asp	Asn	Pro	His	Met	Val	Pro	Pro	Asp	
				80					85					90	
Lys	Cys	Arg	Cys	Ala	Val	Gly	Ser	Ile	Leu	Ser	Glu	Gly	Glu	Glu	
				95					100					105	
Ser	Pro	Ser	Pro	Glu	Leu	Ile	Asp	Leu	Tyr	Gln	Lys	Phe	Gly	Phe	
				110					115					120	
Lys	Val	Phe	Ser	Phe	Pro	Ala	Pro	Ser	His	Val	Val	Thr	Ala	Thr	
				125					130					135	
Phe	Pro	Tyr	Thr	Thr	Ile	Leu	Ser	Ile	Trp	Leu	Ala	Thr	Arg	Arg	
				140					145					150	
Val	His	Pro	Ala	Leu	Asp	Thr	Tyr	Ile	Lys	Glu	Arg	Lys	Leu	Cys	
				155					160					165	
Ala	Tyr	Pro	Arg	Leu	Glu	Ile	Tyr	Gln	Glu	Asp	Gln	Ile	His	Phe	
				170					175					180	

Met	Cys	Pro	Leu	Ala	Arg	Gln	Gly	Asp	Phe	Tyr	Val	Pro	Glu	Met	185	190	195
Lys	Glu	Thr	Glu	Trp	Lys	Trp	Arg	Gly	Leu	Val	Glu	Ala	Ile	Asp	200	205	210
Thr	Gln	Val	Asp	Gly	Thr	Gly	Ala	Asp	Thr	Met	Ser	Asp	Thr	Ser	215	220	225
Ser	Val	Ser	Leu	Glu	Val	Ser	Pro	Gly	Ser	Arg	Glu	Thr	Ser	Ala	230	235	240
Ala	Thr	Leu	Ser	Pro	Gly	Ala	Ser	Ser	Arg	Gly	Trp	Asp	Asp	Gly	245	250	255
Asp	Thr	Arg	Ser	Glu	His	Ser	Tyr	Ser	Glu	Ser	Gly	Ala	Ser	Gly	260	265	270
Ser	Ser	Phe	Glu	Glu	Leu	Asp	Leu	Glu	Gly	Glu	Gly	Pro	Leu	Gly	275	280	285
Glu	Ser	Arg	Leu	Asp	Pro	Gly	Thr	Glu	Pro	Leu	Gly	Thr	Thr	Lys	290	295	300
Trp	Leu	Trp	Glu	Pro	Thr	Ala	Pro	Glu	Lys	Gly	Lys	Glu			305	310	

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 <211> 1510
 <212> DNA
 <213> Homo Sapien

<400> 399
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 ctccagtcct ccagcccctg gccgagagaa gggctcttacc ggccgggatt 150
 gctggaaaca ccaagaggtg gtttttgttt tttaaaactt ctgtttcttg 200
 ggaggggggtg tggcgggggca ggatgagcaa ctccgttcct ctgctctggt 250
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 ccagagggac ggctggaaga taagctccac aaacccaaag ctacacagac 350
 tgaggtcaaa ccattctgtga ggtttaacct ccgcacctcc aaggaccag 400
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 tgcagtttca acatgacagc taaaaccttt ttcattcttc acggatggac 500
 gatgagcggg atctttgaaa actggctgca caaactcgtg tcagccctgc 550
 acacaagaga gaaagacgcc aatgtagttg tggttgactg gctccccctg 600
 gccaccagc tttacacgga tgcggtcaat aataccaggg tgggtgggaca 650

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 aggaacaaga ggaacagcaa aatgtaccta aaaacccggg caggcatgcc 1250
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 tacctccttc ttaataccat gctgcagagc agggcacatc ctagcccagg 1350
 agaagtggcc agcacaatcc aatcaaatcg ttgcaaatca gattacactg 1400
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 aaaaaaaaaa 1510

<210> 400
 <211> 354
 <212> PRT
 <213> Homo Sapien

<400> 400
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 20 25 30
 Leu Glu Asp Lys Leu His Lys Pro Lys Ala Thr Gln Thr Glu Val
 35 40 45
 Lys Pro Ser Val Arg Phe Asn Leu Arg Thr Ser Lys Asp Pro Glu
 50 55 60
 His Glu Gly Cys Tyr Leu Ser Val Gly His Ser Gln Pro Leu Glu
 65 70 75
 Asp Cys Ser Phe Asn Met Thr Ala Lys Thr Phe Phe Ile Ile His

<212> DNA
<213> Homo Sapien

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agctggatgc actgctggtc ttcccaggcc aagtggctca actctcctgc 200
acgctcagcc cccagcacgt caccatcagg gactacggtg tgtcctggta 250
ccagcagcgg gcaggcagtg cccctcgata tctcctctac taccgctcgg 300
aggaggatca ccaccggcct gctgacatcc ccgacgatt ctgggcagcc 350
aaggatgagg cccacaatgc ctgtgtcctc accattagtc ccgtgcagcc 400
tgaagacgac gcggattact actgctctgt tggctacggc tttagtccct 450
aggggtgggg tgtgagatgg gtgcctcccc tctgcctccc atttctgccc 500
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aaaatgggtt aataatattc aacatgtcaa caac 584

<210> 402
<211> 123
<212> PRT
<213> Homo Sapien

<400> 402
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Ser Val Ser Gln Thr Val Leu Ala Gln Leu Asp Ala Leu Leu Val
20 25 30
Phe Pro Gly Gln Val Ala Gln Leu Ser Cys Thr Leu Ser Pro Gln
35 40 45
His Val Thr Ile Arg Asp Tyr Gly Val Ser Trp Tyr Gln Gln Arg
50 55 60
Ala Gly Ser Ala Pro Arg Tyr Leu Leu Tyr Tyr Arg Ser Glu Glu
65 70 75
Asp His His Arg Pro Ala Asp Ile Pro Asp Arg Phe Ser Ala Ala
80 85 90
Lys Asp Glu Ala His Asn Ala Cys Val Leu Thr Ile Ser Pro Val
95 100 105
Gln Pro Glu Asp Asp Ala Asp Tyr Tyr Cys Ser Val Gly Tyr Gly
110 115 120

Phe Ser Pro

<210> 403

<211> 1964

<212> DNA

<213> Homo Sapien

<400> 403

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ggagctgcca gcacagtgtt ggctcacaac aagatgctca aggtgtcagc 150
cgtactgtgt gtgtgtgcag ccgcttggtg cagtcagtct ctgcagctg 200
ccgcggcggg ggctgcagcc ggggggcggg cggacggcgg taattttctg 250
gatgataaac aatggctcac cacaatctct cagtatgaca aggaagtcgg 300
acagtggaaac aaattccgag acgaagtaga ggatgattat ttccgcactt 350
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tgcttaaaga tgaaatgtag tcgccataaa gtatgcattg ctcaagattc 450
tcagactgca gtctgcatta gtcaccggag gcttacacac aggatgaaag 500
aagcaggagt agaccatagg cagtggaggg gtcccatatt atccacctgc 550
aagcagtgcc cagtgggtcta tcccagccct gtttgtgggt cagatgggtc 600
tacctactct tttcagtgc aactagaata tcaggcatgt gtcttaggaa 650
aacagatctc agtcaaagt gaaggacatt gcccatgtcc ttcagataag 700
cccaccagta caagcagaaa tgttaagaga gcatgcagtg acctggagtt 750
caggggaagt gcaaacagat tgcgggactg gttcaaggcc cttcatgaaa 800
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tcagaagcat ttaccttgat aagaatgaac agtgtaccaa ggcattcttc 1000
aattcttgtg acacatacaa ggacagttta atatctaata atgagtgggtg 1050
ctactgcttc cagagacagc aagaccacc ttgccagact gagctcagca 1100
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tggacagtgc tgggtgtgtg acagatatgg aatgaagtc atgggatcca 1250

gaataaatgg tgttgcagat tgtgctatag attttgagat ctccggagat 1300
 ttgctagtg gcgattttca tgaatggact gatgatgagg atgatgaaga 1350
 cgatattatg aatgatgaag atgaaattga agatgatgat gaagatgaag 1400
 gggatgatga tgatgggtgg gatgaccatg atgtatacat ttgattgatg 1450
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 aattctaagt gaaattttaa ataaataaat ttttaatgac ctgggtctta 1850
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 ttgctagacc tagatgagtc aggataacag agagatacca catgactcca 1950
 aaaaaaaaaa aaaa 1964

<210> 404
 <211> 436
 <212> PRT
 <213> Homo Sapien

<400> 404
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 Cys Ser Gln Ser Leu Ala Ala Ala Ala Ala Val Ala Ala Ala Gly
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 Gly Arg Ser Asp Gly Gly Asn Phe Leu Asp Asp Lys Gln Trp Leu
 35 40 45
 Thr Thr Ile Ser Gln Tyr Asp Lys Glu Val Gly Gln Trp Asn Lys
 50 55 60
 Phe Arg Asp Glu Val Glu Asp Asp Tyr Phe Arg Thr Trp Ser Pro
 65 70 75
 Gly Lys Pro Phe Asp Gln Ala Leu Asp Pro Ala Lys Asp Pro Cys
 80 85 90
 Leu Lys Met Lys Cys Ser Arg His Lys Val Cys Ile Ala Gln Asp
 95 100 105
 Ser Gln Thr Ala Val Cys Ile Ser His Arg Arg Leu Thr His Arg

Met	Lys	Glu	Ala	Gly	Val	Asp	His	Arg	Gln	Trp	Arg	Gly	Pro	Ile	110	115	120
				125					130					135			
Leu	Ser	Thr	Cys	Lys	Gln	Cys	Pro	Val	Val	Tyr	Pro	Ser	Pro	Val			
				140					145					150			
Cys	Gly	Ser	Asp	Gly	His	Thr	Tyr	Ser	Phe	Gln	Cys	Lys	Leu	Glu			
				155					160					165			
Tyr	Gln	Ala	Cys	Val	Leu	Gly	Lys	Gln	Ile	Ser	Val	Lys	Cys	Glu			
				170					175					180			
Gly	His	Cys	Pro	Cys	Pro	Ser	Asp	Lys	Pro	Thr	Ser	Thr	Ser	Arg			
				185					190					195			
Asn	Val	Lys	Arg	Ala	Cys	Ser	Asp	Leu	Glu	Phe	Arg	Glu	Val	Ala			
				200					205					210			
Asn	Arg	Leu	Arg	Asp	Trp	Phe	Lys	Ala	Leu	His	Glu	Ser	Gly	Ser			
				215					220					225			
Gln	Asn	Lys	Lys	Thr	Lys	Thr	Leu	Leu	Arg	Pro	Glu	Arg	Ser	Arg			
				230					235					240			
Phe	Asp	Thr	Ser	Ile	Leu	Pro	Ile	Cys	Lys	Asp	Ser	Leu	Gly	Trp			
				245					250					255			
Met	Phe	Asn	Arg	Leu	Asp	Thr	Asn	Tyr	Asp	Leu	Leu	Leu	Asp	Gln			
				260					265					270			
Ser	Glu	Leu	Arg	Ser	Ile	Tyr	Leu	Asp	Lys	Asn	Glu	Gln	Cys	Thr			
				275					280					285			
Lys	Ala	Phe	Phe	Asn	Ser	Cys	Asp	Thr	Tyr	Lys	Asp	Ser	Leu	Ile			
				290					295					300			
Ser	Asn	Asn	Glu	Trp	Cys	Tyr	Cys	Phe	Gln	Arg	Gln	Gln	Asp	Pro			
				305					310					315			
Pro	Cys	Gln	Thr	Glu	Leu	Ser	Asn	Ile	Gln	Lys	Arg	Gln	Gly	Val			
				320					325					330			
Lys	Lys	Leu	Leu	Gly	Gln	Tyr	Ile	Pro	Leu	Cys	Asp	Glu	Asp	Gly			
				335					340					345			
Tyr	Tyr	Lys	Pro	Thr	Gln	Cys	His	Gly	Ser	Val	Gly	Gln	Cys	Trp			
				350					355					360			
Cys	Val	Asp	Arg	Tyr	Gly	Asn	Glu	Val	Met	Gly	Ser	Arg	Ile	Asn			
				365					370					375			
Gly	Val	Ala	Asp	Cys	Ala	Ile	Asp	Phe	Glu	Ile	Ser	Gly	Asp	Phe			
				380					385					390			
Ala	Ser	Gly	Asp	Phe	His	Glu	Trp	Thr	Asp	Asp	Glu	Asp	Asp	Glu			
				395					400					405			

Asp Asp Ile Met Asn Asp Glu Asp Glu Ile Glu Asp Asp Asp Glu
 410 415 420

Asp Glu Gly Asp Asp Asp Asp Gly Gly Asp Asp His Asp Val Tyr
 425 430 435

Ile

<210> 405

<211> 3819

<212> DNA

<213> Homo Sapien

<400> 405

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 tcttggtctca tcgtaacctc cacctcccgg gttcaagtga ttctcatgcc 150
 tcagcctccc gagtagctgg gattacaggt ggtgacttcc aagagtgact 200
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 aaaagggacc tccagctgct cagccagttc ctgaagcatc cccagaaggc 800
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<210> 406
<211> 693
<212> PRT
<213> Homo Sapien
<400> 406

Met	Thr	Pro	Gln	Ser	Leu	Leu	Gln	Thr	Thr	Leu	Phe	Leu	Leu	Ser	1	5	10	15
Leu	Leu	Phe	Leu	Val	Gln	Gly	Ala	His	Gly	Arg	Gly	His	Arg	Glu	20	25	30	
Asp	Phe	Arg	Phe	Cys	Ser	Gln	Arg	Asn	Gln	Thr	His	Arg	Ser	Ser	35	40	45	
Leu	His	Tyr	Lys	Pro	Thr	Pro	Asp	Leu	Arg	Ile	Ser	Ile	Glu	Asn	50	55	60	
Ser	Glu	Glu	Ala	Leu	Thr	Val	His	Ala	Pro	Phe	Pro	Ala	Ala	His	65	70	75	
Pro	Ala	Ser	Arg	Ser	Phe	Pro	Asp	Pro	Arg	Gly	Leu	Tyr	His	Phe	80	85	90	
Cys	Leu	Tyr	Trp	Asn	Arg	His	Ala	Gly	Arg	Leu	His	Leu	Leu	Tyr	95	100	105	
Gly	Lys	Arg	Asp	Phe	Leu	Leu	Ser	Asp	Lys	Ala	Ser	Ser	Leu	Leu	110	115	120	
Cys	Phe	Gln	His	Gln	Glu	Glu	Ser	Leu	Ala	Gln	Gly	Pro	Pro	Leu	125	130	135	
Leu	Ala	Thr	Ser	Val	Thr	Ser	Trp	Trp	Ser	Pro	Gln	Asn	Ile	Ser	140	145	150	
Leu	Pro	Ser	Ala	Ala	Ser	Phe	Thr	Phe	Ser	Phe	His	Ser	Pro	Pro	155	160	165	
His	Thr	Ala	Ala	His	Asn	Ala	Ser	Val	Asp	Met	Cys	Glu	Leu	Lys	170	175	180	
Arg	Asp	Leu	Gln	Leu	Leu	Ser	Gln	Phe	Leu	Lys	His	Pro	Gln	Lys	185	190	195	
Ala	Ser	Arg	Arg	Pro	Ser	Ala	Ala	Pro	Ala	Ser	Gln	Gln	Leu	Gln	200	205	210	
Ser	Leu	Glu	Ser	Lys	Leu	Thr	Ser	Val	Arg	Phe	Met	Gly	Asp	Met	215	220	225	
Val	Ser	Phe	Glu	Glu	Asp	Arg	Ile	Asn	Ala	Thr	Val	Trp	Lys	Leu	230	235	240	
Gln	Pro	Thr	Ala	Gly	Leu	Gln	Asp	Leu	His	Ile	His	Ser	Arg	Gln	245	250	255	
Glu	Glu	Glu	Gln	Ser	Glu	Ile	Met	Glu	Tyr	Ser	Val	Leu	Leu	Pro	260	265	270	
Arg	Thr	Leu	Phe	Gln	Arg	Thr	Lys	Gly	Arg	Ser	Gly	Glu	Ala	Glu	275	280	285	
Lys	Arg	Leu	Leu	Leu	Val	Asp	Phe	Ser	Ser	Gln	Ala	Leu	Phe	Gln				

				290					295					300	
Asp	Lys	Asn	Ser	Ser	Gln	Val	Leu	Gly	Glu	Lys	Val	Leu	Gly	Ile	
				305					310					315	
Val	Val	Gln	Asn	Thr	Lys	Val	Ala	Asn	Leu	Thr	Glu	Pro	Val	Val	
				320					325					330	
Leu	Thr	Phe	Gln	His	Gln	Leu	Gln	Pro	Lys	Asn	Val	Thr	Leu	Gln	
				335					340					345	
Cys	Val	Phe	Trp	Val	Glu	Asp	Pro	Thr	Leu	Ser	Ser	Pro	Gly	His	
				350					355					360	
Trp	Ser	Ser	Ala	Gly	Cys	Glu	Thr	Val	Arg	Arg	Glu	Thr	Gln	Thr	
				365					370					375	
Ser	Cys	Phe	Cys	Asn	His	Leu	Thr	Tyr	Phe	Ala	Val	Leu	Met	Val	
				380					385					390	
Ser	Ser	Val	Glu	Val	Asp	Ala	Val	His	Lys	His	Tyr	Leu	Ser	Leu	
				395					400					405	
Leu	Ser	Tyr	Val	Gly	Cys	Val	Val	Ser	Ala	Leu	Ala	Cys	Leu	Val	
				410					415					420	
Thr	Ile	Ala	Ala	Tyr	Leu	Cys	Ser	Arg	Val	Pro	Leu	Pro	Cys	Arg	
				425					430					435	
Arg	Lys	Pro	Arg	Asp	Tyr	Thr	Ile	Lys	Val	His	Met	Asn	Leu	Leu	
				440					445					450	
Leu	Ala	Val	Phe	Leu	Leu	Asp	Thr	Ser	Phe	Leu	Leu	Ser	Glu	Pro	
				455					460					465	
Val	Ala	Leu	Thr	Gly	Ser	Glu	Ala	Gly	Cys	Arg	Ala	Ser	Ala	Ile	
				470					475					480	
Phe	Leu	His	Phe	Ser	Leu	Leu	Thr	Cys	Leu	Ser	Trp	Met	Gly	Leu	
				485					490					495	
Glu	Gly	Tyr	Asn	Leu	Tyr	Arg	Leu	Val	Val	Glu	Val	Phe	Gly	Thr	
				500					505					510	
Tyr	Val	Pro	Gly	Tyr	Leu	Leu	Lys	Leu	Ser	Ala	Met	Gly	Trp	Gly	
				515					520					525	
Phe	Pro	Ile	Phe	Leu	Val	Thr	Leu	Val	Ala	Leu	Val	Asp	Val	Asp	
				530					535					540	
Asn	Tyr	Gly	Pro	Ile	Ile	Leu	Ala	Val	His	Arg	Thr	Pro	Glu	Gly	
				545					550					555	
Val	Ile	Tyr	Pro	Ser	Met	Cys	Trp	Ile	Arg	Asp	Ser	Leu	Val	Ser	
				560					565					570	
Tyr	Ile	Thr	Asn	Leu	Gly	Leu	Phe	Ser	Leu	Val	Phe	Leu	Phe	Asn	
				575					580					585	

Met	Ala	Met	Leu	Ala	Thr	Met	Val	Val	Gln	Ile	Leu	Arg	Leu	Arg
				590					595				600	
Pro	His	Thr	Gln	Lys	Trp	Ser	His	Val	Leu	Thr	Leu	Leu	Gly	Leu
				605					610				615	
Ser	Leu	Val	Leu	Gly	Leu	Pro	Trp	Ala	Leu	Ile	Phe	Phe	Ser	Phe
				620					625				630	
Ala	Ser	Gly	Thr	Phe	Gln	Leu	Val	Val	Leu	Tyr	Leu	Phe	Ser	Ile
				635					640				645	
Ile	Thr	Ser	Phe	Gln	Gly	Phe	Leu	Ile	Phe	Ile	Trp	Tyr	Trp	Ser
				650					655				660	
Met	Arg	Leu	Gln	Ala	Arg	Gly	Gly	Pro	Ser	Pro	Leu	Lys	Ser	Asn
				665					670				675	
Ser	Asp	Ser	Ala	Arg	Leu	Pro	Ile	Ser	Ser	Gly	Ser	Thr	Ser	Ser
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Ser Arg Ile														

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 <211> 950
 <212> DNA
 <213> Homo Sapien

<400> 407
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 tggcgtgatc atagctcact gcagcctcag actcctggac ttgagaaatc 200
 ctcttgccctt agcctcctgc atatctggga ctccaggggt gcactcaagc 250
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 gtcaccccaa agctcagctc tgagccagag tgggtggtggc tccacctctg 350
 ccgccggcat agaagccagg agcagggctc tcagaaggcg gtggtgcca 400
 gctgggatca tgttggtggc cctggtctgt ctgctcagct gctgctacc 450
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 atgacttcgg gctggacgga taccggggat acagcctggc tgactgggtc 550
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 ggctgatggg agcaccaaca acgggatctt ccagatcaac agccggaggt 650
 ggtgcagcaa cctcaccctg aacgtcccca acgtgtgccg gatgtactgc 700

tcagatttgt tgaatcctaa tctcaaggat accgttatct gtgccatgaa 750
gataacccaa gagcctcagg gtctgggtta ctgggaggcc tggaggcatc 800
actgccaggg aaaagacctc actgaatggg tggatggctg tgacttctag 850
gatggacgga accatgcaca gcaggctggg aaatgtgggt tggttcctga 900
cctaggcttg ggaagacaag ccagcgaata aaggatgggt gaacgtgaaa 950

<210> 408
<211> 146
<212> PRT
<213> Homo Sapien

<400> 408
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Ser Glu Ala Lys Leu Tyr Gly Arg Cys Glu Leu Ala Arg Val Leu
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His Asp Phe Gly Leu Asp Gly Tyr Arg Gly Tyr Ser Leu Ala Asp
35 40 45
Trp Val Cys Leu Ala Tyr Phe Thr Ser Gly Phe Asn Ala Ala Ala
50 55 60
Leu Asp Tyr Glu Ala Asp Gly Ser Thr Asn Asn Gly Ile Phe Gln
65 70 75
Ile Asn Ser Arg Arg Trp Cys Ser Asn Leu Thr Pro Asn Val Pro
80 85 90
Asn Val Cys Arg Met Tyr Cys Ser Asp Leu Leu Asn Pro Asn Leu
95 100 105
Lys Asp Thr Val Ile Cys Ala Met Lys Ile Thr Gln Glu Pro Gln
110 115 120
Gly Leu Gly Tyr Trp Glu Ala Trp Arg His His Cys Gln Gly Lys
125 130 135
Asp Leu Thr Glu Trp Val Asp Gly Cys Asp Phe
140 145

<210> 409
<211> 3617
<212> DNA
<213> Homo Sapien

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gctctgcctc cgggtgctgct gcctggggcg gccggcttca caccttccct 200
cgatagcgac ttcaccttta cccttcccg cggccagaag gaggcttct 250
accagcccat gccctgaag gcctcgctgg agatcgagta ccaagtttta 300
gatggagcag gattagatat tgatttccat cttgcctctc cagaaggcaa 350
aaccttagtt tttgaacaaa gaaaatcaga tggagttcac actgtagaga 400
ctgaagttgg tgattacatg ttctgctttg acaatacatt cagcaccatt 450
tctgagaagg tgattttctt tgaattaatc ctggataata tgggagaaca 500
ggcacaagaa caagaagatt ggaagaaata tattactggc acagatatat 550
tggatatgaa actggaagac atcctggaat ccatcaacag catcaagtcc 600
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tcgtgatcga aacatacaag aaagcaactt tgatagagtc aatttctggt 700
ctatggttaa tttagtggc atggtggtgg tgtcagccat tcaagtttat 750
atgctgaaga gtctgtttga agataagagg aaaagtagaa cttaaaactc 800
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attttgcaga atataggttt aactgaatga agccatatta ataactgcat 1050
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<210> 410

<211> 229

<212> PRT

<213> Homo Sapien

<400> 410

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Ala	Leu	Pro	Pro	Val	Leu	Leu	Pro	Gly	Ala	Ala	Gly	Phe	Thr	Pro
				20					25					30

Ser	Leu	Asp	Ser	Asp	Phe	Thr	Phe	Thr	Leu	Pro	Ala	Gly	Gln	Lys
				35					40					45

Glu	Cys	Phe	Tyr	Gln	Pro	Met	Pro	Leu	Lys	Ala	Ser	Leu	Glu	Ile
				50					55					60

Glu	Tyr	Gln	Val	Leu	Asp	Gly	Ala	Gly	Leu	Asp	Ile	Asp	Phe	His
				65					70					75

Leu	Ala	Ser	Pro	Glu	Gly	Lys	Thr	Leu	Val	Phe	Glu	Gln	Arg	Lys
				80					85					90

Ser	Asp	Gly	Val	His	Thr	Val	Glu	Thr	Glu	Val	Gly	Asp	Tyr	Met
				95					100					105

Phe	Cys	Phe	Asp	Asn	Thr	Phe	Ser	Thr	Ile	Ser	Glu	Lys	Val	Ile
				110					115					120

Phe	Phe	Glu	Leu	Ile	Leu	Asp	Asn	Met	Gly	Glu	Gln	Ala	Gln	Glu
				125					130					135

Gln	Glu	Asp	Trp	Lys	Lys	Tyr	Ile	Thr	Gly	Thr	Asp	Ile	Leu	Asp
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

	140		145		150									
Met	Lys	Leu	Glu	Asp	Ile	Leu	Glu	Ser	Ile	Asn	Ser	Ile	Lys	Ser
				155					160					165
Arg	Leu	Ser	Lys	Ser	Gly	His	Ile	Gln	Ile	Leu	Leu	Arg	Ala	Phe
				170					175					180
Glu	Ala	Arg	Asp	Arg	Asn	Ile	Gln	Glu	Ser	Asn	Phe	Asp	Arg	Val
				185					190					195
Asn	Phe	Trp	Ser	Met	Val	Asn	Leu	Val	Val	Met	Val	Val	Val	Ser
				200					205					210
Ala	Ile	Gln	Val	Tyr	Met	Leu	Lys	Ser	Leu	Phe	Glu	Asp	Lys	Arg
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Lys	Ser	Arg	Thr											

<210> 411
 <211> 4420
 <212> DNA
 <213> Homo Sapien

<400> 411
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 gcctgggtgt tctccttccct ggtcctggaa gtcacatctg tgttggggag 200
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<210> 412

<211> 1184

<212> PRT

<213> Homo Sapien

<400> 412

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Val	Thr	Ser	Val	Leu	Gly	Arg	Gln	Thr	Met	Leu	Thr	Gln	Ser	Val
			20						25					30
Arg	Arg	Val	Gln	Pro	Gly	Lys	Lys	Asn	Pro	Ser	Ile	Phe	Ala	Lys
				35					40					45
Pro	Ala	Asp	Thr	Leu	Glu	Ser	Pro	Gly	Glu	Trp	Thr	Thr	Trp	Phe
				50					55					60
Asn	Ile	Asp	Tyr	Pro	Gly	Gly	Lys	Gly	Asp	Tyr	Glu	Arg	Leu	Asp
				65					70					75
Ala	Ile	Arg	Phe	Tyr	Tyr	Gly	Asp	Arg	Val	Cys	Ala	Arg	Pro	Leu
				80					85					90
Arg	Leu	Glu	Ala	Arg	Thr	Thr	Asp	Trp	Thr	Pro	Ala	Gly	Ser	Thr
				95					100					105
Gly	Gln	Val	Val	His	Gly	Ser	Pro	Arg	Glu	Gly	Phe	Trp	Cys	Leu

	110		115		120
Asn Arg Glu Gln Arg Pro Gly Gln Asn Cys Ser Asn Tyr Thr Val	125		130		135
Arg Phe Leu Cys Pro Pro Gly Ser Leu Arg Arg Asp Thr Glu Arg	140		145		150
Ile Trp Ser Pro Trp Ser Pro Trp Ser Lys Cys Ser Ala Ala Cys	155		160		165
Gly Gln Thr Gly Val Gln Thr Arg Thr Arg Ile Cys Leu Ala Glu	170		175		180
Met Val Ser Leu Cys Ser Glu Ala Ser Glu Glu Gly Gln His Cys	185		190		195
Met Gly Gln Asp Cys Thr Ala Cys Asp Leu Thr Cys Pro Met Gly	200		205		210
Gln Val Asn Ala Asp Cys Asp Ala Cys Met Cys Gln Asp Phe Met	215		220		225
Leu His Gly Ala Val Ser Leu Pro Gly Gly Ala Pro Ala Ser Gly	230		235		240
Ala Ala Ile Tyr Leu Leu Thr Lys Thr Pro Lys Leu Leu Thr Gln	245		250		255
Thr Asp Ser Asp Gly Arg Phe Arg Ile Pro Gly Leu Cys Pro Asp	260		265		270
Gly Lys Ser Ile Leu Lys Ile Thr Lys Val Lys Phe Ala Pro Ile	275		280		285
Val Leu Thr Met Pro Lys Thr Ser Leu Lys Ala Ala Thr Ile Lys	290		295		300
Ala Glu Phe Val Arg Ala Glu Thr Pro Tyr Met Val Met Asn Pro	305		310		315
Glu Thr Lys Ala Arg Arg Ala Gly Gln Ser Val Ser Leu Cys Cys	320		325		330
Lys Ala Thr Gly Lys Pro Arg Pro Asp Lys Tyr Phe Trp Tyr His	335		340		345
Asn Asp Thr Leu Leu Asp Pro Ser Leu Tyr Lys His Glu Ser Lys	350		355		360
Leu Val Leu Arg Lys Leu Gln Gln His Gln Ala Gly Glu Tyr Phe	365		370		375
Cys Lys Ala Gln Ser Asp Ala Gly Ala Val Lys Ser Lys Val Ala	380		385		390
Gln Leu Ile Val Thr Ala Ser Asp Glu Thr Pro Cys Asn Pro Val	395		400		405

Pro	Glu	Ser	Tyr	Leu	Ile	Arg	Leu	Pro	His	Asp	Cys	Phe	Gln	Asn	410	415	420
Ala	Thr	Asn	Ser	Phe	Tyr	Tyr	Asp	Val	Gly	Arg	Cys	Pro	Val	Lys	425	430	435
Thr	Cys	Ala	Gly	Gln	Gln	Asp	Asn	Gly	Ile	Arg	Cys	Arg	Asp	Ala	440	445	450
Val	Gln	Asn	Cys	Cys	Gly	Ile	Ser	Lys	Thr	Glu	Glu	Arg	Glu	Ile	455	460	465
Gln	Cys	Ser	Gly	Tyr	Thr	Leu	Pro	Thr	Lys	Val	Ala	Lys	Glu	Cys	470	475	480
Ser	Cys	Gln	Arg	Cys	Thr	Glu	Thr	Arg	Ser	Ile	Val	Arg	Gly	Arg	485	490	495
Val	Ser	Ala	Ala	Asp	Asn	Gly	Glu	Pro	Met	Arg	Phe	Gly	His	Val	500	505	510
Tyr	Met	Gly	Asn	Ser	Arg	Val	Ser	Met	Thr	Gly	Tyr	Lys	Gly	Thr	515	520	525
Phe	Thr	Leu	His	Val	Pro	Gln	Asp	Thr	Glu	Arg	Leu	Val	Leu	Thr	530	535	540
Phe	Val	Asp	Arg	Leu	Gln	Lys	Phe	Val	Asn	Thr	Thr	Lys	Val	Leu	545	550	555
Pro	Phe	Asn	Lys	Lys	Gly	Ser	Ala	Val	Phe	His	Glu	Ile	Lys	Met	560	565	570
Leu	Arg	Arg	Lys	Glu	Pro	Ile	Thr	Leu	Glu	Ala	Met	Glu	Thr	Asn	575	580	585
Ile	Ile	Pro	Leu	Gly	Glu	Val	Val	Gly	Glu	Asp	Pro	Met	Ala	Glu	590	595	600
Leu	Glu	Ile	Pro	Ser	Arg	Ser	Phe	Tyr	Arg	Gln	Asn	Gly	Glu	Pro	605	610	615
Tyr	Ile	Gly	Lys	Val	Lys	Ala	Ser	Val	Thr	Phe	Leu	Asp	Pro	Arg	620	625	630
Asn	Ile	Ser	Thr	Ala	Thr	Ala	Ala	Gln	Thr	Asp	Leu	Asn	Phe	Ile	635	640	645
Asn	Asp	Glu	Gly	Asp	Thr	Phe	Pro	Leu	Arg	Thr	Tyr	Gly	Met	Phe	650	655	660
Ser	Val	Asp	Phe	Arg	Asp	Glu	Val	Thr	Ser	Glu	Pro	Leu	Asn	Ala	665	670	675
Gly	Lys	Val	Lys	Val	His	Leu	Asp	Ser	Thr	Gln	Val	Lys	Met	Pro	680	685	690
Glu	His	Ile	Ser	Thr	Val	Lys	Leu	Trp	Ser	Leu	Asn	Pro	Asp	Thr			

	695		700		705
Gly Leu Trp Glu	Glu Glu Gly Asp Phe	Lys Phe Glu Asn Gln Arg			
	710	715			720
Arg Asn Lys Arg	Glu Asp Arg Thr Phe	Leu Val Gly Asn Leu Glu			
	725	730			735
Ile Arg Glu Arg	Arg Leu Phe Asn Leu	Asp Val Pro Glu Ser Arg			
	740	745			750
Arg Cys Phe Val	Lys Val Arg Ala Tyr	Arg Ser Glu Arg Phe Leu			
	755	760			765
Pro Ser Glu Gln	Ile Gln Gly Val Val	Ile Ser Val Ile Asn Leu			
	770	775			780
Glu Pro Arg Thr	Gly Phe Leu Ser Asn	Pro Arg Ala Trp Gly Arg			
	785	790			795
Phe Asp Ser Val	Ile Thr Gly Pro Asn	Gly Ala Cys Val Pro Ala			
	800	805			810
Phe Cys Asp Asp	Gln Ser Pro Asp Ala	Tyr Ser Ala Tyr Val Leu			
	815	820			825
Ala Ser Leu Ala	Gly Glu Glu Leu Gln	Ala Val Glu Ser Ser Pro			
	830	835			840
Lys Phe Asn Pro	Asn Ala Ile Gly Val	Pro Gln Pro Tyr Leu Asn			
	845	850			855
Lys Leu Asn Tyr	Arg Arg Thr Asp His	Glu Asp Pro Arg Val Lys			
	860	865			870
Lys Thr Ala Phe	Gln Ile Ser Met Ala	Lys Pro Arg Pro Asn Ser			
	875	880			885
Ala Glu Glu Ser	Asn Gly Pro Ile Tyr	Ala Phe Glu Asn Leu Arg			
	890	895			900
Ala Cys Glu Glu	Ala Pro Pro Ser Ala	Ala His Phe Arg Phe Tyr			
	905	910			915
Gln Ile Glu Gly	Asp Arg Tyr Asp Tyr	Asn Thr Val Pro Phe Asn			
	920	925			930
Glu Asp Asp Pro	Met Ser Trp Thr Glu	Asp Tyr Leu Ala Trp Trp			
	935	940			945
Pro Lys Pro Met	Glu Phe Arg Ala Cys	Tyr Ile Lys Val Lys Ile			
	950	955			960
Val Gly Pro Leu	Glu Val Asn Val Arg	Ser Arg Asn Met Gly Gly			
	965	970			975
Thr His Arg Arg	Thr Val Gly Lys Leu	Tyr Gly Ile Arg Asp Val			
	980	985			990

Arg	Ser	Thr	Arg	Asp	Arg	Asp	Gln	Pro	Asn	Val	Ser	Ala	Ala	Cys
				995					1000					1005
Leu	Glu	Phe	Lys	Cys	Ser	Gly	Met	Leu	Tyr	Asp	Gln	Asp	Arg	Val
			1010						1015					1020
Asp	Arg	Thr	Leu	Val	Lys	Val	Ile	Pro	Gln	Gly	Ser	Cys	Arg	Arg
			1025						1030					1035
Ala	Ser	Val	Asn	Pro	Met	Leu	His	Glu	Tyr	Leu	Val	Asn	His	Leu
			1040						1045					1050
Pro	Leu	Ala	Val	Asn	Asn	Asp	Thr	Ser	Glu	Tyr	Thr	Met	Leu	Ala
			1055						1060					1065
Pro	Leu	Asp	Pro	Leu	Gly	His	Asn	Tyr	Gly	Ile	Tyr	Thr	Val	Thr
			1070						1075					1080
Asp	Gln	Asp	Pro	Arg	Thr	Ala	Lys	Glu	Ile	Ala	Leu	Gly	Arg	Cys
			1085						1090					1095
Phe	Asp	Gly	Thr	Ser	Asp	Gly	Ser	Ser	Arg	Ile	Met	Lys	Ser	Asn
			1100						1105					1110
Val	Gly	Val	Ala	Leu	Thr	Phe	Asn	Cys	Val	Glu	Arg	Gln	Val	Gly
			1115						1120					1125
Arg	Gln	Ser	Ala	Phe	Gln	Tyr	Leu	Gln	Ser	Thr	Pro	Ala	Gln	Ser
			1130						1135					1140
Pro	Ala	Ala	Gly	Thr	Val	Gln	Gly	Arg	Val	Pro	Ser	Arg	Arg	Gln
			1145						1150					1155
Gln	Arg	Ala	Ser	Arg	Gly	Gly	Gln	Arg	Gln	Gly	Gly	Val	Val	Ala
			1160						1165					1170
Ser	Leu	Arg	Phe	Pro	Arg	Val	Ala	Gln	Gln	Pro	Leu	Ile	Asn	
			1175						1180					

<210> 413
 <211> 595
 <212> DNA
 <213> Homo Sapien

<400> 413
 gccacgttgt cttcttttct tcaccaccac ccaggagctc agagatctaa 50
 gctgctttcc atcttttctc ccagccccag gacactgact ctgtacagga 100
 tggggccgct ctcttgctc cttctcatcc taatccccct tctccagctg 150
 atcaaccgga ggagtactca gtgttcctta gactccgtta tggataagaa 200
 gatcaaggat gttctcaaca gtctagagta cagtcctctt cctataagca 250
 agaagctctc gtgtgctagt gtcaaaagcc aaggcagacc gtctctctgc 300
 cctgctggga tggctgtcac tggctgtgct tgtggctatg gctgtggttc 350

gtgggatgtt cagctggaaa ccacctgcca ctgccagtgc agtgtggtgg 400
 actggaccac tgcccgtgc tgccacctga cctgacaggg aggaggctga 450
 gaactcagtt ttgtgacct gacagtaatg aaaccagggt cccaaccaag 500
 aaatctaact caaacgtccc acttcatttg ttccattcct gattcttggg 550
 taataaagac aaactttgta cctcaaaaaa aaaaaaaaaa aaaaa 595

<210> 414
 <211> 111
 <212> PRT
 <213> Homo Sapien

<400> 414
 Met Gly Pro Ser Ser Cys Leu Leu Leu Ile Leu Ile Pro Leu Leu
 1 5 10 15
 Gln Leu Ile Asn Pro Gly Ser Thr Gln Cys Ser Leu Asp Ser Val
 20 25 30
 Met Asp Lys Lys Ile Lys Asp Val Leu Asn Ser Leu Glu Tyr Ser
 35 40 45
 Pro Ser Pro Ile Ser Lys Lys Leu Ser Cys Ala Ser Val Lys Ser
 50 55 60
 Gln Gly Arg Pro Ser Ser Cys Pro Ala Gly Met Ala Val Thr Gly
 65 70 75
 Cys Ala Cys Gly Tyr Gly Cys Gly Ser Trp Asp Val Gln Leu Glu
 80 85 90
 Thr Thr Cys His Cys Gln Cys Ser Val Val Asp Trp Thr Thr Ala
 95 100 105
 Arg Cys Cys His Leu Thr
 110

<210> 415
 <211> 1621
 <212> DNA
 <213> Homo Sapien

<400> 415
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 cccccccggt gtgaggcggc ctcacagggc cgggtgggct ggcgagccga 100
 cgcggcggcg gaggaggctg tgaggagtgt gtggaacagg acccgggaca 150
 gaggaaccat ggctccgcag aacctgagca ccttttgctt gttgctgcta 200
 tacctcatcg gggcggtgat tgccggacga gatttctata agatcttggg 250
 ggtgcctcga agtgctctta taaaggatat taaaaaggcc tataggaaac 300

tagccctgca gcttcatccc gaccggaacc ctgatgatcc acaagcccag 350
gagaaattcc aggatctggg tgctgcttat gaggttctgt cagatagtga 400
gaaacggaaa cagtacgata cttatggtga agaaggatta aaagatggtc 450
atcagagctc ccatggagac attttttcac acttctttgg ggattttggt 500
ttcatgtttg gaggaacccc tcgtcagcaa gacagaaata ttccaagagg 550
aagtgatatt attgtagatc tagaagtcac tttggaagaa gtatatgcag 600
gaaattttgt ggaagtagtt agaaacaaac ctgtggcaag gcaggctcct 650
ggcaaacgga agtgcaattg tcggcaagag atgcggacca cccagctggg 700
ccctgggctc ttccaaatga cccaggagggt ggtctgctgac gaatgcccta 750
atgtcaaaact agtgaatgaa gaacgaacgc tggaagtaga aatagagcct 800
ggggtgagag acggcatgga gtaccccttt attggagaag gtgagcctca 850
cgtggatggg gagcctggag atttacgggt ccgaatcaaa gttgtcaagc 900
acccaatatt tgaaaggaga ggagatgatt tgtacacaaa tgtgacaatc 950
tcattagtgt agtcaactgg tggttttgag atggatatta ctacttgga 1000
tggtcacaag gtacatattt cccgggataa gatcaccagg ccaggagcga 1050
agctatggaa gaaaggggaa gggctcccca actttgacaa caacaatatc 1100
aagggtcttt tgataatcac ttttgatgtg gattttccaa aagaacagtt 1150
aacagaggaa gcgagagaag gtatcaaaca gctactgaaa caagggtcag 1200
tgcagaaggt atacaatgga ctgcaaggat attgagagtg aataaaattg 1250
gactttgttt aaaataagtg aataagcgat atttattatc tgcaaggttt 1300
ttttgtgtgt gttttgttt ttattttcaa tatgcaagtt aggettaatt 1350
tttttatcta atgatcatca tgaaatgaat aagagggtt aagaatttgt 1400
ccatttgcac tcggaaaaga atgaccagca aaagggttac taatacctct 1450
ccctttgggg atttaatgtc tgggtgctgcc gcctgagttt caagaattaa 1500
agctgcaaga ggactccagg agcaaaaagaa acacaatata gagggttgga 1550
gttgtagca atttcattca aaatgccaac tggagaagtc tgtttttaaa 1600
tacattttgt tgttattttt a 1621

<210> 416

<211> 358

<212> PRT

<213> Homo Sapien

<400> 416

Met	Ala	Pro	Gln	Asn	Leu	Ser	Thr	Phe	Cys	Leu	Leu	Leu	Leu	Tyr
1				5					10					15
Leu	Ile	Gly	Ala	Val	Ile	Ala	Gly	Arg	Asp	Phe	Tyr	Lys	Ile	Leu
				20					25					30
Gly	Val	Pro	Arg	Ser	Ala	Ser	Ile	Lys	Asp	Ile	Lys	Lys	Ala	Tyr
				35					40					45
Arg	Lys	Leu	Ala	Leu	Gln	Leu	His	Pro	Asp	Arg	Asn	Pro	Asp	Asp
				50					55					60
Pro	Gln	Ala	Gln	Glu	Lys	Phe	Gln	Asp	Leu	Gly	Ala	Ala	Tyr	Glu
				65					70					75
Val	Leu	Ser	Asp	Ser	Glu	Lys	Arg	Lys	Gln	Tyr	Asp	Thr	Tyr	Gly
				80					85					90
Glu	Glu	Gly	Leu	Lys	Asp	Gly	His	Gln	Ser	Ser	His	Gly	Asp	Ile
				95					100					105
Phe	Ser	His	Phe	Phe	Gly	Asp	Phe	Gly	Phe	Met	Phe	Gly	Gly	Thr
				110					115					120
Pro	Arg	Gln	Gln	Asp	Arg	Asn	Ile	Pro	Arg	Gly	Ser	Asp	Ile	Ile
				125					130					135
Val	Asp	Leu	Glu	Val	Thr	Leu	Glu	Glu	Val	Tyr	Ala	Gly	Asn	Phe
				140					145					150
Val	Glu	Val	Val	Arg	Asn	Lys	Pro	Val	Ala	Arg	Gln	Ala	Pro	Gly
				155					160					165
Lys	Arg	Lys	Cys	Asn	Cys	Arg	Gln	Glu	Met	Arg	Thr	Thr	Gln	Leu
				170					175					180
Gly	Pro	Gly	Arg	Phe	Gln	Met	Thr	Gln	Glu	Val	Val	Cys	Asp	Glu
				185					190					195
Cys	Pro	Asn	Val	Lys	Leu	Val	Asn	Glu	Glu	Arg	Thr	Leu	Glu	Val
				200					205					210
Glu	Ile	Glu	Pro	Gly	Val	Arg	Asp	Gly	Met	Glu	Tyr	Pro	Phe	Ile
				215					220					225
Gly	Glu	Gly	Glu	Pro	His	Val	Asp	Gly	Glu	Pro	Gly	Asp	Leu	Arg
				230					235					240
Phe	Arg	Ile	Lys	Val	Val	Lys	His	Pro	Ile	Phe	Glu	Arg	Arg	Gly
				245					250					255
Asp	Asp	Leu	Tyr	Thr	Asn	Val	Thr	Ile	Ser	Leu	Val	Glu	Ser	Leu
				260					265					270
Val	Gly	Phe	Glu	Met	Asp	Ile	Thr	His	Leu	Asp	Gly	His	Lys	Val
				275					280					285

His	Ile	Ser	Arg	Asp	Lys	Ile	Thr	Arg	Pro	Gly	Ala	Lys	Leu	Trp
				290					295					300
Lys	Lys	Gly	Glu	Gly	Leu	Pro	Asn	Phe	Asp	Asn	Asn	Asn	Ile	Lys
				305					310					315
Gly	Ser	Leu	Ile	Ile	Thr	Phe	Asp	Val	Asp	Phe	Pro	Lys	Glu	Gln
				320					325					330
Leu	Thr	Glu	Glu	Ala	Arg	Glu	Gly	Ile	Lys	Gln	Leu	Leu	Lys	Gln
				335					340					345
Gly	Ser	Val	Gln	Lys	Val	Tyr	Asn	Gly	Leu	Gln	Gly	Tyr		
				350					355					

<210> 417
 <211> 1547
 <212> DNA
 <213> Homo Sapien

<400> 417
 cggcggcggc tgcgggcgcg aggtgagggg cgcgaggtga ggggcgcgag 50
 gttcccagca ggatgccccg gctctgcagg aagctgaagt gagaggcccc 100
 gagagggccc agcccgcccc gggcaggatg accaaggccc ggctgttccg 150
 gctgtggctg gtgctggggt cgggtgttcat gatcctgctg atcatcgtgt 200
 actgggacag cgcaggcgcc gcgcacttct acttgcacac gtccttctct 250
 aggccgcaca cggggccgcc gctgcccacg cccgggcccg acagggacag 300
 ggagctcacg gccgactccg atgtcgacga gtttctggac aagtttctca 350
 gtgctggcgt gaagcagagc gaccttccca gaaaggagac ggagcagccg 400
 cctgcgccgg ggagcatgga ggagagcgtg agaggctacg actggtcccc 450
 gcgcgacgcc cggcgcagcc cagaccaggg ccggcagcag gcggagcgga 500
 ggagcgtgct gcggggcttc tgcgccaact ccagcctggc cttccccacc 550
 aaggagcgcg cattcgacga catccccaac tcggagctga gccacctgat 600
 cgtggacgac cggcacgggg ccatctactg ctacgtgcc aaggtggcct 650
 gcaccaactg gaagcgcgtg atgatcgtgc tgagcggaag cctgctgcac 700
 cgcggtgcgc cctaccgca cccgtgcgc atcccgcgcg agcacgtgca 750
 caacgccagc gcgcacctga cttcaacaa gttctggcgc cgctacggga 800
 agctctcccc ccacctcatg aaggtcaagc tcaagaagta caccaagttc 850
 ctcttcgtgc gcgaccctt cgtgcgcctg atctccgcct tccgcagcaa 900
 gttcgagctg gagaacgagg agttctaccg caagttcgcc gtgcccattgc 950

tgcggctgta cgccaaccac accagcctgc ccgcctcggc gcgcgaggcc 1000
 ttccgcgctg gcctcaaggt gtccttcgcc aacttcatcc agtacctgct 1050
 ggaccgcac acggagaagc tggcgccctt caacgagcac tggcggcagg 1100
 tgtaccgcct ctgccaccgc tgccagatcg actacgactt cgtggggaag 1150
 ctggagactc tggacgagga cgccgcgcag ctgctgcagc tactccaggt 1200
 ggaccggcag ctccgcttcc ccccgagcta ccggaacagg accgccagca 1250
 gctgggagga ggactgggtc gccaaagatcc ccctggcctg gaggcagcag 1300
 ctgtataaac tctacgaggc cgactttggt ctcttcggct accccaagcc 1350
 cgaaaacctc ctccgagact gaaagctttc gcgttgcttt ttctcgcgtg 1400
 cctggaacct gacgcacgcg cactccagtt tttttatgac ctacgatttt 1450
 gcaatctggg cttcttggtc actccactgc ctctatccat tgagtactgt 1500
 atcgatattg ttttttaaga ttaatatatt tcaggtattt aatacga 1547

<210> 418

<211> 414

<212> PRT

<213> Homo Sapien

<400> 418

Met	Thr	Lys	Ala	Arg	Leu	Phe	Arg	Leu	Trp	Leu	Val	Leu	Gly	Ser
1				5					10					15

Val	Phe	Met	Ile	Leu	Leu	Ile	Ile	Val	Tyr	Trp	Asp	Ser	Ala	Gly
			20						25					30

Ala	Ala	His	Phe	Tyr	Leu	His	Thr	Ser	Phe	Ser	Arg	Pro	His	Thr
				35					40					45

Gly	Pro	Pro	Leu	Pro	Thr	Pro	Gly	Pro	Asp	Arg	Asp	Arg	Glu	Leu
			50						55					60

Thr	Ala	Asp	Ser	Asp	Val	Asp	Glu	Phe	Leu	Asp	Lys	Phe	Leu	Ser
			65						70					75

Ala	Gly	Val	Lys	Gln	Ser	Asp	Leu	Pro	Arg	Lys	Glu	Thr	Glu	Gln
			80						85					90

Pro	Pro	Ala	Pro	Gly	Ser	Met	Glu	Glu	Ser	Val	Arg	Gly	Tyr	Asp
			95						100					105

Trp	Ser	Pro	Arg	Asp	Ala	Arg	Arg	Ser	Pro	Asp	Gln	Gly	Arg	Gln
			110						115					120

Gln	Ala	Glu	Arg	Arg	Ser	Val	Leu	Arg	Gly	Phe	Cys	Ala	Asn	Ser
			125						130					135

Ser	Leu	Ala	Phe	Pro	Thr	Lys	Glu	Arg	Ala	Phe	Asp	Asp	Ile	Pro
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

	140		145		150
Asn Ser Glu Leu Ser His Leu Ile Val Asp Asp Arg His Gly Ala	155		160		165
Ile Tyr Cys Tyr Val Pro Lys Val Ala Cys Thr Asn Trp Lys Arg	170		175		180
Val Met Ile Val Leu Ser Gly Ser Leu Leu His Arg Gly Ala Pro	185		190		195
Tyr Arg Asp Pro Leu Arg Ile Pro Arg Glu His Val His Asn Ala	200		205		210
Ser Ala His Leu Thr Phe Asn Lys Phe Trp Arg Arg Tyr Gly Lys	215		220		225
Leu Ser Arg His Leu Met Lys Val Lys Leu Lys Lys Tyr Thr Lys	230		235		240
Phe Leu Phe Val Arg Asp Pro Phe Val Arg Leu Ile Ser Ala Phe	245		250		255
Arg Ser Lys Phe Glu Leu Glu Asn Glu Glu Phe Tyr Arg Lys Phe	260		265		270
Ala Val Pro Met Leu Arg Leu Tyr Ala Asn His Thr Ser Leu Pro	275		280		285
Ala Ser Ala Arg Glu Ala Phe Arg Ala Gly Leu Lys Val Ser Phe	290		295		300
Ala Asn Phe Ile Gln Tyr Leu Leu Asp Pro His Thr Glu Lys Leu	305		310		315
Ala Pro Phe Asn Glu His Trp Arg Gln Val Tyr Arg Leu Cys His	320		325		330
Pro Cys Gln Ile Asp Tyr Asp Phe Val Gly Lys Leu Glu Thr Leu	335		340		345
Asp Glu Asp Ala Ala Gln Leu Leu Gln Leu Leu Gln Val Asp Arg	350		355		360
Gln Leu Arg Phe Pro Pro Ser Tyr Arg Asn Arg Thr Ala Ser Ser	365		370		375
Trp Glu Glu Asp Trp Phe Ala Lys Ile Pro Leu Ala Trp Arg Gln	380		385		390
Gln Leu Tyr Lys Leu Tyr Glu Ala Asp Phe Val Leu Phe Gly Tyr	395		400		405
Pro Lys Pro Glu Asn Leu Leu Arg Asp	410				

<210> 419
 <211> 1781

<212> DNA
<213> Homo Sapien

<400> 419

ggcacgaggc tgaaccacgc cggctccatc tcagcttctg gtttctaagt 50
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tttcttcctt ctggaaatct ttgactgtgg gtagttattt atttctgaat 150
aagagcgtcc acgcatcatg gacctcgcgg gactgctgaa gtctcagttc 200
ctgtgccacc tgggtcttctg ctacgtcttt attgcctcag ggctaatacat 250
caacaccatt cagctcttca ctctcctcct ctggccatt aacaagcagc 300
tcttccggaa gatcaactgc agactgtcct attgcatctc aagccagctg 350
gtgatgctgc tggagtgggtg gtcgggcacg gaatgcacca tcttcacgga 400
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accacaagtt tgaaattgac tttctgtgtg gctggagcct gtccgaacgc 500
tttgggctgt tagggggctc caaggctctg gccaaagaaag agctggccta 550
tgtcccaatt atcggtgga tgtggtactt caccgagatg gtcttctgtt 600
cgcgcaagtg ggagcaggat cgcaagacgg ttgccaccag tttgcagcac 650
ctccgggact accccgagaa gtatttttct ctgattcact gtgagggcac 700
acggttcacg gagaagaagc atgagatcag catgcagggtg gcccgggcca 750
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gccatcaccg tgaggagctt gagaaatgta gtttcagctg tatatgactg 850
tacactcaat ttcagaaata atgaaaatcc aacactgctg ggagtcctaa 900
acggaaagaa ataccatgca gatttgtatg ttaggaggat cccactggaa 950
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ccaggagaag gatgccttctc aggaggagta ctacaggacg ggcaccttcc 1050
cagagacgcc catggtgccc ccccggcggc cctggacctc cgtgaactgg 1100
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tctttgtggc ctccgtggga gttcgatgga tgattggtgt gacggaaatt 1250
gacaagggtc ctgcctacgg caactctgac agcaagcaga aactgaatga 1300
ctgactcagg gaggtgtcac catccgaagg gaaccttggg gaactggtgg 1350

cctctgcata tcctccttag tgggacacgg tgacaaaggc tgggtgagcc 1400
 cctgctgggc acggcggaag tcacgacctc tccagccagg gagtctggtc 1450
 tcaaggccgg atggggagga agatgttttg taatcttttt ttccccatgt 1500
 gcttttagtgg gctttgggtt tctttttgtg cgagtgtgtg tgagaatggc 1550
 tgtgtgggtga gtgtgaactt tgttctgtga tcatagaaag ggtatttttag 1600
 gctgcagggg agggcagggc tggggaccga aggggacaag ttcccctttc 1650
 atcctttggg gctgagtttt ctgtaaccct tggttgccag agataaagtg 1700
 aaaagtgctt taggtgagat gactaaatta tgcctccaag aaaaaaaaaat 1750
 taaagtgctt ttctgggtca aaaaaaaaaa a 1781

<210> 420
 <211> 378
 <212> PRT
 <213> Homo Sapien

<400> 420
 Met Asp Leu Ala Gly Leu Leu Lys Ser Gln Phe Leu Cys His Leu
 1 5 10 15
 Val Phe Cys Tyr Val Phe Ile Ala Ser Gly Leu Ile Ile Asn Thr
 20 25 30
 Ile Gln Leu Phe Thr Leu Leu Leu Trp Pro Ile Asn Lys Gln Leu
 35 40 45
 Phe Arg Lys Ile Asn Cys Arg Leu Ser Tyr Cys Ile Ser Ser Gln
 50 55 60
 Leu Val Met Leu Leu Glu Trp Trp Ser Gly Thr Glu Cys Thr Ile
 65 70 75
 Phe Thr Asp Pro Arg Ala Tyr Leu Lys Tyr Gly Lys Glu Asn Ala
 80 85 90
 Ile Val Val Leu Asn His Lys Phe Glu Ile Asp Phe Leu Cys Gly
 95 100 105
 Trp Ser Leu Ser Glu Arg Phe Gly Leu Leu Gly Gly Ser Lys Val
 110 115 120
 Leu Ala Lys Lys Glu Leu Ala Tyr Val Pro Ile Ile Gly Trp Met
 125 130 135
 Trp Tyr Phe Thr Glu Met Val Phe Cys Ser Arg Lys Trp Glu Gln
 140 145 150
 Asp Arg Lys Thr Val Ala Thr Ser Leu Gln His Leu Arg Asp Tyr
 155 160 165
 Pro Glu Lys Tyr Phe Phe Leu Ile His Cys Glu Gly Thr Arg Phe

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<210> 422

<211> 293

<212> PRT

<213> Homo Sapien

<400> 422

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Val Pro Gly Gly Pro Trp Gly Arg Trp Val His Trp Ser Arg Arg

<212> DNA
<213> Homo Sapien

<400> 423

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<210> 424
 <211> 349
 <212> PRT
 <213> Homo Sapien

<400> 424
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 35 40 45
 Asn Trp Thr Leu Val Met Glu Gly Glu Trp Met Leu Lys Phe Tyr

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				65					70					75
Ala	Phe	Ala	Lys	Asn	Gly	Glu	Ile	Leu	Gln	Ile	Ser	Val	Gly	Lys
				80					85					90
Val	Asp	Val	Ile	Gln	Glu	Pro	Gly	Leu	Ser	Gly	Arg	Phe	Phe	Val
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Thr	Thr	Leu	Pro	Ala	Phe	Phe	His	Ala	Lys	Asp	Gly	Ile	Phe	Arg
				110					115					120
Arg	Tyr	Arg	Gly	Pro	Gly	Ile	Phe	Glu	Asp	Leu	Gln	Asn	Tyr	Ile
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Leu	Glu	Lys	Lys	Trp	Gln	Ser	Val	Glu	Pro	Leu	Thr	Gly	Trp	Lys
				140					145					150
Ser	Pro	Ala	Ser	Leu	Thr	Met	Ser	Gly	Met	Ala	Gly	Leu	Phe	Ser
				155					160					165
Ile	Ser	Gly	Lys	Ile	Trp	His	Leu	His	Asn	Tyr	Phe	Thr	Val	Thr
				170					175					180
Leu	Gly	Ile	Pro	Ala	Trp	Cys	Ser	Tyr	Val	Phe	Phe	Val	Ile	Ala
				185					190					195
Thr	Leu	Val	Phe	Gly	Leu	Phe	Met	Gly	Leu	Val	Leu	Val	Val	Ile
				200					205					210
Ser	Glu	Cys	Phe	Tyr	Val	Pro	Leu	Pro	Arg	His	Leu	Ser	Glu	Arg
				215					220					225
Ser	Glu	Gln	Asn	Arg	Arg	Ser	Glu	Glu	Ala	His	Arg	Ala	Glu	Gln
				230					235					240
Leu	Gln	Asp	Ala	Glu	Glu	Glu	Lys	Asp	Asp	Ser	Asn	Glu	Glu	Glu
				245					250					255
Asn	Lys	Asp	Ser	Leu	Val	Asp	Asp	Glu	Glu	Glu	Lys	Glu	Asp	Leu
				260					265					270
Gly	Asp	Glu	Asp	Glu	Ala	Glu	Glu	Glu	Glu	Glu	Glu	Asp	Asn	Leu
				275					280					285
Ala	Ala	Gly	Val	Asp	Glu	Glu	Arg	Ser	Glu	Ala	Asn	Asp	Gln	Gly
				290					295					300
Pro	Pro	Gly	Glu	Asp	Gly	Val	Thr	Arg	Glu	Glu	Val	Glu	Pro	Glu
				305					310					315
Glu	Ala	Glu	Glu	Gly	Ile	Ser	Glu	Gln	Pro	Cys	Pro	Ala	Asp	Thr
				320					325					330
Glu	Val	Val	Glu	Asp	Ser	Leu	Arg	Gln	Arg	Lys	Ser	Gln	His	Ala
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Asp Lys Gly Leu

<210> 425

<211> 4040

<212> DNA

<213> Homo Sapien

<400> 425

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<210> 426

<211> 747

<212> PRT

<213> Homo Sapien

<400> 426

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				20					25					30	
Gly	Thr	Asp	Gln	Asp	Phe	Tyr	Ser	Leu	Leu	Gly	Val	Ser	Lys	Thr	
				35					40					45	
Ala	Ser	Ser	Arg	Glu	Ile	Arg	Gln	Ala	Phe	Lys	Lys	Leu	Ala	Leu	
				50					55					60	
Lys	Leu	His	Pro	Asp	Lys	Asn	Pro	Asn	Asn	Pro	Asn	Ala	His	Gly	
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Asp	Phe	Leu	Lys	Ile	Asn	Arg	Ala	Tyr	Glu	Val	Leu	Lys	Asp	Glu	
				80					85					90	
Asp	Leu	Arg	Lys	Lys	Tyr	Asp	Lys	Tyr	Gly	Glu	Lys	Gly	Leu	Glu	
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Asp	Asn	Gln	Gly	Gly	Gln	Tyr	Glu	Ser	Trp	Asn	Tyr	Tyr	Arg	Tyr	
				110					115					120	
Asp	Phe	Gly	Ile	Tyr	Asp	Asp	Asp	Pro	Glu	Ile	Ile	Thr	Leu	Glu	
				125					130					135	
Arg	Arg	Glu	Phe	Asp	Ala	Ala	Val	Asn	Ser	Gly	Glu	Leu	Trp	Phe	
				140					145					150	
Val	Asn	Phe	Tyr	Ser	Pro	Gly	Cys	Ser	His	Cys	His	Asp	Leu	Ala	
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Pro	Thr	Trp	Arg	Asp	Phe	Ala	Lys	Glu	Val	Asp	Gly	Leu	Leu	Arg	
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Ile	Gly	Ala	Val	Asn	Cys	Gly	Asp	Asp	Arg	Met	Leu	Cys	Arg	Met	
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Lys	Gly	Val	Asn	Ser	Tyr	Pro	Ser	Leu	Phe	Ile	Phe	Arg	Ser	Gly	
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				215					220					225	
Val	Ser	Phe	Ala	Met	Gln	His	Val	Arg	Ser	Thr	Val	Thr	Glu	Leu	
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Trp	Thr	Gly	Asn	Phe	Val	Asn	Ser	Ile	Gln	Thr	Ala	Phe	Ala	Ala	
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				260					265					270	
Leu	Thr	Ser	Gln	Thr	Arg	Leu	Arg	Leu	Ser	Gly	Met	Leu	Phe	Leu	
				275					280					285	

Asn Ser Leu Asp	Ala Lys Glu Ile Tyr	Leu Glu Val Ile His Asn
290	295	300
Leu Pro Asp Phe	Glu Leu Leu Ser Ala Asn Thr Leu Glu Asp Arg	315
305	310	
Leu Ala His His	Arg Trp Leu Leu Phe Phe His Phe Gly Lys Asn	330
320	325	
Glu Asn Ser Asn Asp	Pro Glu Leu Lys Lys Leu Lys Thr Leu Leu	345
335	340	
Lys Asn Asp His	Ile Gln Val Gly Arg Phe Asp Cys Ser Ser Ala	360
350	355	
Pro Asp Ile Cys	Ser Asn Leu Tyr Val Phe Gln Pro Ser Leu Ala	375
365	370	
Val Phe Lys Gly	Gln Gly Thr Lys Glu Tyr Glu Ile His His Gly	390
380	385	
Lys Lys Ile Leu	Tyr Asp Ile Leu Ala Phe Ala Lys Glu Ser Val	405
395	400	
Asn Ser His Val	Thr Thr Leu Gly Pro Gln Asn Phe Pro Ala Asn	420
410	415	
Asp Lys Glu Pro	Trp Leu Val Asp Phe Phe Ala Pro Trp Cys Pro	435
425	430	
Pro Cys Arg Ala	Leu Leu Pro Glu Leu Arg Arg Ala Ser Asn Leu	450
440	445	
Leu Tyr Gly Gln	Leu Lys Phe Gly Thr Leu Asp Cys Thr Val His	465
455	460	
Glu Gly Leu Cys	Asn Met Tyr Asn Ile Gln Ala Tyr Pro Thr Thr	480
470	475	
Val Val Phe Asn	Gln Ser Asn Ile His Glu Tyr Glu Gly His His	495
485	490	
Ser Ala Glu Gln	Ile Leu Glu Phe Ile Glu Asp Leu Met Asn Pro	510
500	505	
Ser Val Val Ser	Leu Thr Pro Thr Thr Phe Asn Glu Leu Val Thr	525
515	520	
Gln Arg Lys His	Asn Glu Val Trp Met Val Asp Phe Tyr Ser Pro	540
530	535	
Trp Cys His Pro	Cys Gln Val Leu Met Pro Glu Trp Lys Arg Met	555
545	550	
Ala Arg Thr Leu	Thr Gly Leu Ile Asn Val Gly Ser Ile Asp Cys	570
560	565	
Gln Gln Tyr His	Ser Phe Cys Ala Gln Glu Asn Val Gln Arg Tyr	

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<210> 428

<211> 266

<212> PRT

<213> Homo Sapien

<400> 428

Met	Met	Ala	Leu	Gly	Ala	Ala	Gly	Ala	Thr	Arg	Val	Phe	Val	Ala
1				5					10					15

Met	Val	Ala	Ala	Ala	Leu	Gly	Gly	His	Pro	Leu	Leu	Gly	Val	Ser
				20					25					30

Ala	Thr	Leu	Asn	Ser	Val	Leu	Asn	Ser	Asn	Ala	Ile	Lys	Asn	Leu
				35					40					45

Pro Pro Pro Leu Gly Gly Ala Ala Gly His Pro Gly Ser Ala Val
50 55 60

Ser Ala Ala Pro Gly Ile Leu Tyr Pro Gly Gly Asn Lys Tyr Gln
65 70 75

Thr Ile Asp Asn Tyr Gln Pro Tyr Pro Cys Ala Glu Asp Glu Glu
80 85 90

Cys Gly Thr Asp Glu Tyr Cys Ala Ser Pro Thr Arg Gly Gly Asp
95 100 105

Ala Gly Val Gln Ile Cys Leu Ala Cys Arg Lys Arg Arg Lys Arg
110 115 120

Cys Met Arg His Ala Met Cys Cys Pro Gly Asn Tyr Cys Lys Asn
125 130 135

Gly Ile Cys Val Ser Ser Asp Gln Asn His Phe Arg Gly Glu Ile
140 145 150

Glu Glu Thr Ile Thr Glu Ser Phe Gly Asn Asp His Ser Thr Leu
155 160 165

Asp Gly Tyr Ser Arg Arg Thr Thr Leu Ser Ser Lys Met Tyr His
170 175 180

Thr Lys Gly Gln Glu Gly Ser Val Cys Leu Arg Ser Ser Asp Cys
185 190 195

Ala Ser Gly Leu Cys Cys Ala Arg His Phe Trp Ser Lys Ile Cys
200 205 210

Lys Pro Val Leu Lys Glu Gly Gln Val Cys Thr Lys His Arg Arg
215 220 225

Lys Gly Ser His Gly Leu Glu Ile Phe Gln Arg Cys Tyr Cys Gly
230 235 240

Glu Gly Leu Ser Cys Arg Ile Gln Lys Asp His His Gln Ala Ser
245 250 255

Asn Ser Ser Arg Leu His Thr Cys Gln Arg His
260 265

<210> 429

<211> 1523

<212> DNA

<213> Homo Sapien

<400> 429

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cttcctatcc ttacccgacc tcagatgctc cttctgctc ctggttaactt 200

gggttttttac tcctgtaaca actgaaataa caagtcttgc tacagagaat 250
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 tgactgggtgt cgtttcagtc agatgttgca tccaattttt gaggaagctt 350
 ccgatgtcat taaggaagaa tttccaaatg aaaatcaagt agtgtttgcc 400
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 aatacagggg tcagcgatca gtgaaagcat tggcagatta catcaggcaa 550
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 cctacgtggg ggaaatagta aacctatatt ttcataattc tatgtgtatt 1450
 tttattttga ataaacagaa agaaatttaa aaaaaaaaaa aaaaaaaaaa 1500
 aaaaaaaaaa aaaaaaaaaa aaa 1523

<210> 430
 <211> 406
 <212> PRT
 <213> Homo Sapien

<400> 430

Met	His	Pro	Ala	Val	Phe	Leu	Ser	Leu	Pro	Asp	Leu	Arg	Cys	Ser	1	5	10	15
Leu	Leu	Leu	Leu	Val	Thr	Trp	Val	Phe	Thr	Pro	Val	Thr	Thr	Glu	20	25	30	
Ile	Thr	Ser	Leu	Ala	Thr	Glu	Asn	Ile	Asp	Glu	Ile	Leu	Asn	Asn	35	40	45	
Ala	Asp	Val	Ala	Leu	Val	Asn	Phe	Tyr	Ala	Asp	Trp	Cys	Arg	Phe	50	55	60	
Ser	Gln	Met	Leu	His	Pro	Ile	Phe	Glu	Glu	Ala	Ser	Asp	Val	Ile	65	70	75	
Lys	Glu	Glu	Phe	Pro	Asn	Glu	Asn	Gln	Val	Val	Phe	Ala	Arg	Val	80	85	90	
Asp	Cys	Asp	Gln	His	Ser	Asp	Ile	Ala	Gln	Arg	Tyr	Arg	Ile	Ser	95	100	105	
Lys	Tyr	Pro	Thr	Leu	Lys	Leu	Phe	Arg	Asn	Gly	Met	Met	Met	Lys	110	115	120	
Arg	Glu	Tyr	Arg	Gly	Gln	Arg	Ser	Val	Lys	Ala	Leu	Ala	Asp	Tyr	125	130	135	
Ile	Arg	Gln	Gln	Lys	Ser	Asp	Pro	Ile	Gln	Glu	Ile	Arg	Asp	Leu	140	145	150	
Ala	Glu	Ile	Thr	Thr	Leu	Asp	Arg	Ser	Lys	Arg	Asn	Ile	Ile	Gly	155	160	165	
Tyr	Phe	Glu	Gln	Lys	Asp	Ser	Asp	Asn	Tyr	Arg	Val	Phe	Glu	Arg	170	175	180	
Val	Ala	Asn	Ile	Leu	His	Asp	Asp	Cys	Ala	Phe	Leu	Ser	Ala	Phe	185	190	195	
Gly	Asp	Val	Ser	Lys	Pro	Glu	Arg	Tyr	Ser	Gly	Asp	Asn	Ile	Ile	200	205	210	
Tyr	Lys	Pro	Pro	Gly	His	Ser	Ala	Pro	Asp	Met	Val	Tyr	Leu	Gly	215	220	225	
Ala	Met	Thr	Asn	Phe	Asp	Val	Thr	Tyr	Asn	Trp	Ile	Gln	Asp	Lys	230	235	240	
Cys	Val	Pro	Leu	Val	Arg	Glu	Ile	Thr	Phe	Glu	Asn	Gly	Glu	Glu	245	250	255	
Leu	Thr	Glu	Glu	Gly	Leu	Pro	Phe	Leu	Ile	Leu	Phe	His	Met	Lys	260	265	270	
Glu	Asp	Thr	Glu	Ser	Leu	Glu	Ile	Phe	Gln	Asn	Glu	Val	Ala	Arg	275	280	285	

Gln	Leu	Ile	Ser	Glu	Lys	Gly	Thr	Ile	Asn	Phe	Leu	His	Ala	Asp	
				290					295					300	
Cys	Asp	Lys	Phe	Arg	His	Pro	Leu	Leu	His	Ile	Gln	Lys	Thr	Pro	
				305					310					315	
Ala	Asp	Cys	Pro	Val	Ile	Ala	Ile	Asp	Ser	Phe	Arg	His	Met	Tyr	
				320					325					330	
Val	Phe	Gly	Asp	Phe	Lys	Asp	Val	Leu	Ile	Pro	Gly	Lys	Leu	Lys	
				335					340					345	
Gln	Phe	Val	Phe	Asp	Leu	His	Ser	Gly	Lys	Leu	His	Arg	Glu	Phe	
				350					355					360	
His	His	Gly	Pro	Asp	Pro	Thr	Asp	Thr	Ala	Pro	Gly	Glu	Gln	Ala	
				365					370					375	
Gln	Asp	Val	Ala	Ser	Ser	Pro	Pro	Glu	Ser	Ser	Phe	Gln	Lys	Leu	
				380					385					390	
Ala	Pro	Ser	Glu	Tyr	Arg	Tyr	Thr	Leu	Leu	Arg	Asp	Arg	Asp	Glu	
				395					400					405	

Leu

<210> 431
 <211> 1575
 <212> DNA
 <213> Homo Sapien

<400> 431
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 aggccctgga gtgctacagc tgcgtgcaga aagcagatga cggatgctcc 150
 ccgaacaaga tgaagacagt gaagtgcgcg ccgggctggtg acgtctgcac 200
 cgaggccgtg ggggctggtg agaccatcca cggacaattc tcgctggcag 250
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 cttcacgggc ttctggcggt catccagctg cagcaatgcg ctcaggatcg 350
 ctgcaacgcc aagctcaacc tcacctcgcg ggcgctcgac ccggcaggta 400
 atgagagtgc ataccgccc aacggcgtgg agtgctacag ctgtgtgggc 450
 ctgagccggg aggcgtgcca gggatcatcg ccgccggtcg tgagctgcta 500
 caacgccagc gatcatgtct acaagggtg cttcgacggc aacgtcacct 550
 tgacggcagc taatgtgact gtgtccttgc ctgtccgggg ctgtgtccag 600
 gatgaattct gcactcggga tggagtaaca ggcccagggt tcacgctcag 650

tggctcctgt tgccaggggt cccgctgtaa ctctgacctc cgcaacaaga 700
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 cccacgactg tggcctcaac cacatctgtc accacttcta cctcggcccc 800
 agtgagaccc acatccacca ccaaaccat gccagcgcca accagtcaga 850
 ctccgagaca gggagtagaa cacgaggcct cccgggatga ggagcccagg 900
 ttgactggag gcgccgctgg ccaccaggac cgcagcaatt cagggcagta 950
 tcctgcaaaa ggggggcccc agcagcccca taataaaggc tgtgtggctc 1000
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 ctgtgagctt ctccacctgg aaatttccct ctcacctact tctctggccc 1100
 tgggtacccc tcttctcctc acttcctgtt cccaccactg gactgggctg 1150
 gccagcccc tgtttttcca acattcccca gtatccccag cttctgctgc 1200
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 ggggtgttcta gctttttgag gacagctcct gtatccttct catccttctc 1300
 tctccgcttg tcctcttggt atgttaggac agagtgagag aagtcagctg 1350
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 tagccagcct ggactttgga gcgtggggtg ggtgggacaa tggctcccca 1450
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 ccaattcgcc ctatagttag tcgta 1575

<210> 432
 <211> 346
 <212> PRT
 <213> Homo Sapien

<400> 432
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 Ala Gly Trp Leu Leu Leu Leu Leu Leu Arg Gly Gly Ala Gln Ala
 20 25 30
 Leu Glu Cys Tyr Ser Cys Val Gln Lys Ala Asp Asp Gly Cys Ser
 35 40 45
 Pro Asn Lys Met Lys Thr Val Lys Cys Ala Pro Gly Val Asp Val
 50 55 60
 Cys Thr Glu Ala Val Gly Ala Val Glu Thr Ile His Gly Gln Phe
 65 70 75

<211> 1657
<212> DNA
<213> Homo Sapien

<400> 433

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gtcctggcca gtgcagctga aaaggagaag gaaatggacc cttttcatta 150
tgattaccag accctgagga ttgggggact ggtgttcgct gtggtcctct 200
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aatcagaagc cccggggccc aggagatgag gaagcccagg tggagaacct 300
catcacgcc aatgcaacag agccccagaa gcagagaact gaagtgcagc 350
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<210> 434
 <211> 120
 <212> PRT
 <213> Homo Sapien

<400> 434
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 Val Leu Ala Ser Ala Ala Glu Lys Glu Lys Glu Met Asp Pro Phe
 20 25 30
 His Tyr Asp Tyr Gln Thr Leu Arg Ile Gly Gly Leu Val Phe Ala
 35 40 45
 Val Val Leu Phe Ser Val Gly Ile Leu Leu Ile Leu Ser Arg Arg
 50 55 60
 Cys Lys Cys Ser Phe Asn Gln Lys Pro Arg Ala Pro Gly Asp Glu
 65 70 75
 Glu Ala Gln Val Glu Asn Leu Ile Thr Ala Asn Ala Thr Glu Pro
 80 85 90
 Gln Lys Gln Arg Thr Glu Val Gln Pro Ser Gly Gly Ser Leu Trp
 95 100 105
 Asn Leu Arg Arg Leu Leu Glu Pro Leu Asp Ala Asn Val Asp Ala
 110 115 120

<210> 435
 <211> 1297
 <212> DNA
 <213> Homo Sapien

<400> 435
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 ctctctttgc tatgacatca ccgtcatccc taagttcaga cctggaccac 150
 ggtggtgtgc ggttcaaggc caggtggatg aaaagacttt tcttcactat 200

gactgtggca acaagacagt cacacctgtc agtcccctgg ggaagaaact 250
 aaatgtcaca acggcctgga aagcacagaa cccagtactg agagaggtgg 300
 tggacatact tacagagcaa ctgctgtgaca ttcagctgga gaattacaca 350
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 aaaaaattta tattaatgat tgtttccttt agtaatttat tggtctgtac 1250
 tgatatttaa ataaagagtt ctatttccca aaaaaaaaaa aaaaaaa 1297

<210> 436
 <211> 246
 <212> PRT
 <213> Homo Sapien

<400> 436
 Met Ala Ala Ala Ala Thr Lys Ile Leu Leu Cys Leu Pro Leu
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 Leu Leu Leu Leu Ser Gly Trp Ser Arg Ala Gly Arg Ala Asp Pro
 20 25 30
 His Ser Leu Cys Tyr Asp Ile Thr Val Ile Pro Lys Phe Arg Pro
 35 40 45

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 attatattaa aatttaaaga caaaaagtca aaaca 2185

<210> 438

<211> 653

<212> PRT

<213> Homo Sapien

<400> 438

Met	Lys	Leu	Leu	Trp	Gln	Val	Thr	Val	His	His	His	Thr	Trp	Asn
1				5					10					15
Ala	Ile	Leu	Leu	Pro	Phe	Val	Tyr	Leu	Thr	Ala	Gln	Val	Trp	Ile
				20					25					30
Leu	Cys	Ala	Ala	Ile	Ala	Ala	Ala	Ala	Ser	Ala	Gly	Pro	Gln	Asn
				35					40					45
Cys	Pro	Ser	Val	Cys	Ser	Cys	Ser	Asn	Gln	Phe	Ser	Lys	Val	Val
				50					55					60
Cys	Thr	Arg	Arg	Gly	Leu	Ser	Glu	Val	Pro	Gln	Gly	Ile	Pro	Ser
				65					70					75
Asn	Thr	Arg	Tyr	Leu	Asn	Leu	Met	Glu	Asn	Asn	Ile	Gln	Met	Ile
				80					85					90
Gln	Ala	Asp	Thr	Phe	Arg	His	Leu	His	His	Leu	Glu	Val	Leu	Gln
				95					100					105
Leu	Gly	Arg	Asn	Ser	Ile	Arg	Gln	Ile	Glu	Val	Gly	Ala	Phe	Asn
				110					115					120
Gly	Leu	Ala	Ser	Leu	Asn	Thr	Leu	Glu	Leu	Phe	Asp	Asn	Trp	Leu
				125					130					135
Thr	Val	Ile	Pro	Ser	Gly	Ala	Phe	Glu	Tyr	Leu	Ser	Lys	Leu	Arg
				140					145					150
Glu	Leu	Trp	Leu	Arg	Asn	Asn	Pro	Ile	Glu	Ser	Ile	Pro	Ser	Tyr
				155					160					165

Ala	Phe	Asn	Arg	Val	Pro	Ser	Leu	Met	Arg	Leu	Asp	Leu	Gly	Glu	
				170					175					180	
Leu	Lys	Lys	Leu	Glu	Tyr	Ile	Ser	Glu	Gly	Ala	Phe	Glu	Gly	Leu	
				185					190					195	
Phe	Asn	Leu	Lys	Tyr	Leu	Asn	Leu	Gly	Met	Cys	Asn	Ile	Lys	Asp	
				200					205					210	
Met	Pro	Asn	Leu	Thr	Pro	Leu	Val	Gly	Leu	Glu	Glu	Leu	Glu	Met	
				215					220					225	
Ser	Gly	Asn	His	Phe	Pro	Glu	Ile	Arg	Pro	Gly	Ser	Phe	His	Gly	
				230					235					240	
Leu	Ser	Ser	Leu	Lys	Lys	Leu	Trp	Val	Met	Asn	Ser	Gln	Val	Ser	
				245					250					255	
Leu	Ile	Glu	Arg	Asn	Ala	Phe	Asp	Gly	Leu	Ala	Ser	Leu	Val	Glu	
				260					265					270	
Leu	Asn	Leu	Ala	His	Asn	Asn	Leu	Ser	Ser	Leu	Pro	His	Asp	Leu	
				275					280					285	
Phe	Thr	Pro	Leu	Arg	Tyr	Leu	Val	Glu	Leu	His	Leu	His	His	Asn	
				290					295					300	
Pro	Trp	Asn	Cys	Asp	Cys	Asp	Ile	Leu	Trp	Leu	Ala	Trp	Trp	Leu	
				305					310					315	
Arg	Glu	Tyr	Ile	Pro	Thr	Asn	Ser	Thr	Cys	Cys	Gly	Arg	Cys	His	
				320					325					330	
Ala	Pro	Met	His	Met	Arg	Gly	Arg	Tyr	Leu	Val	Glu	Val	Asp	Gln	
				335					340					345	
Ala	Ser	Phe	Gln	Cys	Ser	Ala	Pro	Phe	Ile	Met	Asp	Ala	Pro	Arg	
				350					355					360	
Asp	Leu	Asn	Ile	Ser	Glu	Gly	Arg	Met	Ala	Glu	Leu	Lys	Cys	Arg	
				365					370					375	
Thr	Pro	Pro	Met	Ser	Ser	Val	Lys	Trp	Leu	Leu	Pro	Asn	Gly	Thr	
				380					385					390	
Val	Leu	Ser	His	Ala	Ser	Arg	His	Pro	Arg	Ile	Ser	Val	Leu	Asn	
				395					400					405	
Asp	Gly	Thr	Leu	Asn	Phe	Ser	His	Val	Leu	Leu	Ser	Asp	Thr	Gly	
				410					415					420	
Val	Tyr	Thr	Cys	Met	Val	Thr	Asn	Val	Ala	Gly	Asn	Ser	Asn	Ala	
				425					430					435	
Ser	Ala	Tyr	Leu	Asn	Val	Ser	Thr	Ala	Glu	Leu	Asn	Thr	Ser	Asn	
				440					445					450	
Tyr	Ser	Phe	Phe	Thr	Thr	Val	Thr	Val	Glu	Thr	Thr	Glu	Ile	Ser	

aaatagtga aaaatgtggt gtgtgacatg taaaaatgct caacctgggt 350
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 tcaacacggt gctttaataa atcacttgcc ctgc 434

<210> 440
 <211> 83
 <212> PRT
 <213> Homo Sapien

<400> 440
 Met Arg Leu Ser Val Cys Leu Leu Met Val Ser Leu Ala Leu Cys
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 Cys Tyr Gln Ala His Ala Leu Val Cys Pro Ala Val Ala Ser Glu
 20 25 30
 Ile Thr Val Phe Leu Phe Leu Ser Asp Ala Ala Val Asn Leu Gln
 35 40 45
 Val Ala Lys Leu Asn Pro Pro Pro Glu Ala Leu Ala Ala Lys Leu
 50 55 60
 Glu Val Lys His Cys Thr Asp Gln Ile Ser Phe Lys Lys Arg Leu
 65 70 75
 Ser Leu Lys Lys Ser Trp Trp Lys
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<210> 441
 <211> 654
 <212> DNA
 <213> Homo Sapien

<400> 441
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 acctgtctgc aaccagctg aggccatgcc ctcccaggg accgtctgca 200
 gcctcctgct cctcgcatg ctctggctgg acttgccat ggcaggctcc 250
 agcttcctga gccctgaaca ccagagagtc cagcagagaa aggagtcgaa 300
 gaagccacca gccaaagtgc agccccagc tctagcaggc tggctccgcc 350
 cggaagatgg aggtcaagca gaaggggcag aggatgaact ggaagtccgg 400
 ttcaacgccc cttttgatgt tggaatcaag ctgtcagggg ttcagtacca 450
 gcagcacagc caggccctgg ggaagtttct tcaggacatc ctctgggaag 500
 aggccaaaga ggccccagcc gacaagtgat cgccacaag cttactcac 550

ctctctctaa gtttagaagc gctcatctgg cttttcgctt gcttctgcag 600
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 tgta 654

<210> 442
 <211> 117
 <212> PRT
 <213> Homo Sapien

<400> 442
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 Leu Trp Leu Asp Leu Ala Met Ala Gly Ser Ser Phe Leu Ser Pro
 20 25 30
 Glu His Gln Arg Val Gln Gln Arg Lys Glu Ser Lys Lys Pro Pro
 35 40 45
 Ala Lys Leu Gln Pro Arg Ala Leu Ala Gly Trp Leu Arg Pro Glu
 50 55 60
 Asp Gly Gly Gln Ala Glu Gly Ala Glu Asp Glu Leu Glu Val Arg
 65 70 75
 Phe Asn Ala Pro Phe Asp Val Gly Ile Lys Leu Ser Gly Val Gln
 80 85 90
 Tyr Gln Gln His Ser Gln Ala Leu Gly Lys Phe Leu Gln Asp Ile
 95 100 105
 Leu Trp Glu Glu Ala Lys Glu Ala Pro Ala Asp Lys
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<210> 443
 <211> 1332
 <212> DNA
 <213> Homo Sapien

<400> 443
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 cacgcctggg gccagagtct ttgtcccccg tgtgcgcatg tggtcagggt 400

cagcctctcc cagaagtgag atcatggaca aaaagggcaa atcacaggaa 450
gaaattaaat ccatgaggac ccagcaggcc cagcaagaag ctgaactcac 500
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tgtggtcttg cttggtctca cagtgggcac agcggtaggc ggtcagtcac 750
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<210> 444

<211> 142

<212> PRT

<213> Homo Sapien

<400> 444

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Gln	Thr	Leu	Ile	Val	Val	Ile	Ile	Gly	Met	Leu	Val	Leu	Leu	Leu
				20				25					30	
Asp	Phe	Leu	Gly	Leu	Val	His	Leu	Gly	Gln	Leu	Leu	Ile	Phe	His
				35				40					45	
Ile	Tyr	Leu	Ser	Met	Ser	Pro	Thr	Leu	Ser	Pro	Arg	Ser	Pro	Gln
				50				55					60	
Gly	Trp	Val	Val	Arg	Ala	Ala	His	Leu	Thr	Pro	Leu	Leu	Glu	Tyr
				65				70					75	

Val	Pro	Asn	Pro	Glu	Pro	Pro	Thr	Pro	Gly	Ala	Arg	Val	Phe	Val
				80					85					90
Pro	Arg	Val	Arg	Met	Cys	Ser	Gly	Ser	Ala	Ser	Pro	Arg	Ser	Glu
				95					100					105
Ile	Met	Asp	Lys	Lys	Gly	Lys	Ser	Gln	Glu	Glu	Ile	Lys	Ser	Met
				110					115					120
Arg	Thr	Gln	Gln	Ala	Gln	Gln	Glu	Ala	Glu	Leu	Thr	Pro	Arg	Pro
				125					130					135
Ala	Gly	Val	Val	Pro	Gly	Ala								
				140										

<210> 445
 <211> 687
 <212> DNA
 <213> Homo Sapien

<400> 445
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 ccagcccagg agccccaaaa gcaagaggaa ggggcaaggg cggcctgggc 150
 ccctggcccc tggccctcac caggtgccac tggacctggt gtcacggatg 200
 aaaccgtatg cccgcatgga ggagtatgag aggaacatcg aggagatggt 250
 ggcccagctg aggaacagct cagagctggc ccagagaaag tgtgaggtca 300
 acttgcagct gtggatgtcc aacaagagga gcctgtctcc ctggggctac 350
 agcatcaacc acgaccccag ccgtatcccc gtggacctgc cggaggcacg 400
 gtgcctgtgt ctgggctgtg tgaacccctt caccatgcag gaggaccgca 450
 gcatggtgag cgtgccggtg ttcagccagg ttctgtgcg ccgccgcctc 500
 tgcccgccac cgcccgcac agggccttgc cgccagcgcg cagtcatgga 550
 gaccatcgct gtgggctgca cctgcattct ctgaatcacc tggcccagaa 600
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 ggcctatgaa aagtaaacac tgacttttga aagcaag 687

<210> 446
 <211> 180
 <212> PRT
 <213> Homo Sapien

Met	Asp	Trp	Pro	His	Asn	Leu	Leu	Phe	Leu	Leu	Thr	Ile	Ser	Ile
1					5				10					15

Phe Leu Gly Leu Gly Gln Pro Arg Ser Pro Lys Ser Lys Arg Lys
20 25 30
Gly Gln Gly Arg Pro Gly Pro Leu Ala Pro Gly Pro His Gln Val
35 40 45
Pro Leu Asp Leu Val Ser Arg Met Lys Pro Tyr Ala Arg Met Glu
50 55 60
Glu Tyr Glu Arg Asn Ile Glu Glu Met Val Ala Gln Leu Arg Asn
65 70 75
Ser Ser Glu Leu Ala Gln Arg Lys Cys Glu Val Asn Leu Gln Leu
80 85 90
Trp Met Ser Asn Lys Arg Ser Leu Ser Pro Trp Gly Tyr Ser Ile
95 100 105
Asn His Asp Pro Ser Arg Ile Pro Val Asp Leu Pro Glu Ala Arg
110 115 120
Cys Leu Cys Leu Gly Cys Val Asn Pro Phe Thr Met Gln Glu Asp
125 130 135
Arg Ser Met Val Ser Val Pro Val Phe Ser Gln Val Pro Val Arg
140 145 150
Arg Arg Leu Cys Pro Pro Pro Pro Arg Thr Gly Pro Cys Arg Gln
155 160 165
Arg Ala Val Met Glu Thr Ile Ala Val Gly Cys Thr Cys Ile Phe
170 175 180

<210> 447
<211> 1484
<212> DNA
<213> Homo Sapien

<400> 447
ggagtgacaga tggcatcctt cggttcttcc agacaagctg caagacgctg 50
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cctatctgcc atcctcagca tgctatcact cagcttctcc acaacatccc 150
tgctcagcaa ctactggttt gtgggcacac agaagggtgcc caagcccctg 200
tgcgagaaaag gtctggcagc caagtgcttt gacatgccag tgtccctgga 250
tgagataacc aacacatcca ccaggaggt ggtacaatac aactgggaga 300
ctggggatga ccggttctcc ttccggagct tccggagtgg catgtggcta 350
tcctgtgagg aaactgtgga agaaccaggg gagaggtgcc gaagtttcat 400
tgaacttaca ccaccagcca agagaggtga gaaaggacta ctggaatttg 450
ccacgttgca aggcccatgt caccctcctc tccgatttgg aggggaagcgg 500

Met	Pro	Val	Ser	Leu	Asp	Gly	Asp	Thr	Asn	Thr	Ser	Thr	Gln	Glu	65	70	75
Val	Val	Gln	Tyr	Asn	Trp	Glu	Thr	Gly	Asp	Asp	Arg	Phe	Ser	Phe	80	85	90
Arg	Ser	Phe	Arg	Ser	Gly	Met	Trp	Leu	Ser	Cys	Glu	Glu	Thr	Val	95	100	105
Glu	Glu	Pro	Gly	Glu	Arg	Cys	Arg	Ser	Phe	Ile	Glu	Leu	Thr	Pro	110	115	120
Pro	Ala	Lys	Arg	Gly	Glu	Lys	Gly	Leu	Leu	Glu	Phe	Ala	Thr	Leu	125	130	135
Gln	Gly	Pro	Cys	His	Pro	Thr	Leu	Arg	Phe	Gly	Gly	Lys	Arg	Leu	140	145	150
Met	Glu	Lys	Ala	Ser	Leu	Pro	Ser	Pro	Pro	Leu	Gly	Leu	Cys	Gly	155	160	165
Lys	Asn	Pro	Met	Val	Ile	Pro	Gly	Asn	Ala	Asp	His	Leu	His	Arg	170	175	180
Thr	Ser	Ile	His	Gln	Leu	Pro	Pro	Ala	Thr	Asn	Arg	Leu	Ala	Thr	185	190	195
His	Trp	Glu	Pro	Cys	Leu	Trp	Ala	Gln	Thr	Glu	Arg	Leu	Cys	Cys	200	205	210
Cys	Phe	Leu	Cys	Pro	Val	Arg	Ser	Pro	Gly	Asp	Gly	Gly	Pro	His	215	220	225
Asp	Val	Phe	Thr	Ser	Leu	Pro	Ser	Asp	Cys	Gln	Leu	Gly	Ser	Arg	230	235	240
Arg	Leu	Glu	Thr	Thr	Cys	Leu	Glu	Leu	Trp	Leu	Gly	Leu	Leu	His	245	250	255
Gly	Leu	Ala	Leu	Leu	His	Leu	Leu	His	Gly	Val	Gly	Cys	His	His	260	265	270
Leu	Gln	His	Val	His	Gln	Asp	Gly	Ala	Gly	Val	Gln	Val	Gln	Ala	275	280	285

<210> 449

<211> 4104

<212> DNA

<213> Homo Sapien

<400> 449

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cacgcgtccg cccacgcgtc cgccacgcgc tccggtgcaa gtcgcgcgcg 100

cacactgcct ggtggaggga aggagcccgc gcgcctctcg ccgctccccg 150

cgccgcgcgc cgcacctccc caccgcccgc cgcccgcgc ccgcccgcgc 200

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<210> 450

<211> 522

<212> PRT

<213> Homo Sapien

<400> 450

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				20					25					30

Met	Leu	Pro	Ala	Ala	Pro	Ser	Gly	Cys	Pro	Gln	Leu	Cys	Arg	Cys
				35				40						45

Glu	Gly	Arg	Leu	Leu	Tyr	Cys	Glu	Ala	Leu	Asn	Leu	Thr	Glu	Ala
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Pro	His	Asn	Leu	Ser 65	Gly	Leu	Leu	Gly	Leu 70	Ser	Leu	Arg	Tyr	Asn 75
Ser	Leu	Ser	Glu	Leu 80	Arg	Ala	Gly	Gln	Phe 85	Thr	Gly	Leu	Met	Gln 90
Leu	Thr	Trp	Leu	Tyr 95	Leu	Asp	His	Asn	His 100	Ile	Cys	Ser	Val	Gln 105
Gly	Asp	Ala	Phe	Gln 110	Lys	Leu	Arg	Arg	Val 115	Lys	Glu	Leu	Thr	Leu 120
Ser	Ser	Asn	Gln	Ile 125	Thr	Gln	Leu	Pro	Asn 130	Thr	Thr	Phe	Arg	Pro 135
Met	Pro	Asn	Leu	Arg 140	Ser	Val	Asp	Leu	Ser 145	Tyr	Asn	Lys	Leu	Gln 150
Ala	Leu	Ala	Pro	Asp 155	Leu	Phe	His	Gly	Leu 160	Arg	Lys	Leu	Thr	Thr 165
Leu	His	Met	Arg	Ala 170	Asn	Ala	Ile	Gln	Phe 175	Val	Pro	Val	Arg	Ile 180
Phe	Gln	Asp	Cys	Arg 185	Ser	Leu	Lys	Phe	Leu 190	Asp	Ile	Gly	Tyr	Asn 195
Gln	Leu	Lys	Ser	Leu 200	Ala	Arg	Asn	Ser	Phe 205	Ala	Gly	Leu	Phe	Lys 210
Leu	Thr	Glu	Leu	His 215	Leu	Glu	His	Asn	Asp 220	Leu	Val	Lys	Val	Asn 225
Phe	Ala	His	Phe	Pro 230	Arg	Leu	Ile	Ser	Leu 235	His	Ser	Leu	Cys	Leu 240
Arg	Arg	Asn	Lys	Val 245	Ala	Ile	Val	Val	Ser 250	Ser	Leu	Asp	Trp	Val 255
Trp	Asn	Leu	Glu	Lys 260	Met	Asp	Leu	Ser	Gly 265	Asn	Glu	Ile	Glu	Tyr 270
Met	Glu	Pro	His	Val 275	Phe	Glu	Thr	Val	Pro 280	His	Leu	Gln	Ser	Leu 285
Gln	Leu	Asp	Ser	Asn 290	Arg	Leu	Thr	Tyr	Ile 295	Glu	Pro	Arg	Ile	Leu 300
Asn	Ser	Trp	Lys	Ser 305	Leu	Thr	Ser	Ile	Thr 310	Leu	Ala	Gly	Asn	Leu 315
Trp	Asp	Cys	Gly	Arg 320	Asn	Val	Cys	Ala	Leu 325	Ala	Ser	Trp	Leu	Ser 330
Asn	Phe	Gln	Gly	Arg 335	Tyr	Asp	Gly	Asn	Leu 340	Gln	Cys	Ala	Ser	Pro 345

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Glu Tyr Ala Gln Gly Glu Asp Val Leu Asp Ala Val Tyr Ala Phe	350	355	360
His Leu Cys Glu Asp Gly Ala Glu Pro Thr Ser Gly His Leu Leu	365	370	375
Ser Ala Val Thr Asn Arg Ser Asp Leu Gly Pro Pro Ala Ser Ser	380	385	390
Ala Thr Thr Leu Ala Asp Gly Gly Glu Gly Gln His Asp Gly Thr	395	400	405
Phe Glu Pro Ala Thr Val Ala Leu Pro Gly Gly Glu His Ala Glu	410	415	420
Asn Ala Val Gln Ile His Lys Val Val Thr Gly Thr Met Ala Leu	425	430	435
Ile Phe Ser Phe Leu Ile Val Val Leu Val Leu Tyr Val Ser Trp	440	445	450
Lys Cys Phe Pro Ala Ser Leu Arg Gln Leu Arg Gln Cys Phe Val	455	460	465
Thr Gln Arg Arg Lys Gln Lys Gln Lys Gln Thr Met His Gln Met	470	475	480
Ala Ala Met Ser Ala Gln Glu Tyr Tyr Val Asp Tyr Lys Pro Asn	485	490	495
His Ile Glu Gly Ala Leu Val Ile Ile Asn Glu Tyr Gly Ser Cys	500	505	510
Thr Cys His Gln Gln Pro Ala Arg Glu Cys Glu Val	515	520	

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 <212> DNA
 <213> Homo Sapien

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 gagagaaaat tagggggaga aaggacagag agagcaacta ccatccatag 200
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 cgaaatttat cttggtgtcc ttcatacttg ctgcactgag tctttcaacc 300
 accttttctc tccaactaga ccagcaaaag gttctactag tttcttttga 350
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 acaaaaacct accctaacca ttatactttg gtaactggcc tctttgcaga 500
 gaatcatggg attggtgcaa atgatatggt tgatcctatt cggaacaaat 550
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<211> 477

<212> PRT

<213> Homo Sapien

<400> 452

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Ser	Leu	Ser	Thr	Thr	Phe	Ser	Leu	Gln	Leu	Asp	Gln	Gln	Lys	Val
			20						25					30

Leu	Leu	Val	Ser	Phe	Asp	Gly	Phe	Arg	Trp	Asp	Tyr	Leu	Tyr	Lys
			35						40					45

Val	Pro	Thr	Pro	His	Phe	His	Tyr	Ile	Met	Lys	Tyr	Gly	Val	His
				50					55					60

Val	Lys	Gln	Val	Thr	Asn	Val	Phe	Ile	Thr	Lys	Thr	Tyr	Pro	Asn
				65					70					75

His	Tyr	Thr	Leu	Val	Thr	Gly	Leu	Phe	Ala	Glu	Asn	His	Gly	Ile
			80						85					90

Val	Ala	Asn	Asp	Met	Phe	Asp	Pro	Ile	Arg	Asn	Lys	Ser	Phe	Ser
				95					100					105

Leu	Asp	His	Met	Asn	Ile	Tyr	Asp	Ser	Lys	Phe	Trp	Glu	Glu	Ala	110	115	120
Thr	Pro	Ile	Trp	Ile	Thr	Asn	Gln	Arg	Ala	Gly	His	Thr	Ser	Gly	125	130	135
Ala	Ala	Met	Trp	Pro	Gly	Thr	Asp	Val	Lys	Ile	His	Lys	Arg	Phe	140	145	150
Pro	Thr	His	Tyr	Met	Pro	Tyr	Asn	Glu	Ser	Val	Ser	Phe	Glu	Asp	155	160	165
Arg	Val	Ala	Lys	Ile	Val	Glu	Trp	Phe	Thr	Ser	Lys	Glu	Pro	Ile	170	175	180
Asn	Leu	Gly	Leu	Leu	Tyr	Trp	Glu	Asp	Pro	Asp	Asp	Met	Gly	His	185	190	195
His	Leu	Gly	Pro	Asp	Ser	Pro	Leu	Met	Gly	Pro	Val	Ile	Ser	Asp	200	205	210
Ile	Asp	Lys	Lys	Leu	Gly	Tyr	Leu	Ile	Gln	Met	Leu	Lys	Lys	Ala	215	220	225
Lys	Leu	Trp	Asn	Thr	Leu	Asn	Leu	Ile	Ile	Thr	Ser	Asp	His	Gly	230	235	240
Met	Thr	Gln	Cys	Ser	Glu	Glu	Arg	Leu	Ile	Glu	Leu	Asp	Gln	Tyr	245	250	255
Leu	Asp	Lys	Asp	His	Tyr	Thr	Leu	Ile	Asp	Gln	Ser	Pro	Val	Ala	260	265	270
Ala	Ile	Leu	Pro	Lys	Glu	Gly	Lys	Phe	Asp	Glu	Val	Tyr	Glu	Ala	275	280	285
Leu	Thr	His	Ala	His	Pro	Asn	Leu	Thr	Val	Tyr	Lys	Lys	Glu	Asp	290	295	300
Val	Pro	Glu	Arg	Trp	His	Tyr	Lys	Tyr	Asn	Ser	Arg	Ile	Gln	Pro	305	310	315
Ile	Ile	Ala	Val	Ala	Asp	Glu	Gly	Trp	His	Ile	Leu	Gln	Asn	Lys	320	325	330
Ser	Asp	Asp	Phe	Leu	Leu	Gly	Asn	His	Gly	Tyr	Asp	Asn	Ala	Leu	335	340	345
Ala	Asp	Met	His	Pro	Ile	Phe	Leu	Ala	His	Gly	Pro	Ala	Phe	Arg	350	355	360
Lys	Asn	Phe	Ser	Lys	Glu	Ala	Met	Asn	Ser	Thr	Asp	Leu	Tyr	Pro	365	370	375
Leu	Leu	Cys	His	Leu	Leu	Asn	Ile	Thr	Ala	Met	Pro	His	Asn	Gly	380	385	390
Ser	Phe	Trp	Asn	Val	Gln	Asp	Leu	Leu	Asn	Ser	Ala	Met	Pro	Arg			

395	400	405
Val Val Pro Tyr Thr Gln Ser Thr Ile	Leu Leu Pro Gly Ser Val	
410	415	420
Lys Pro Ala Glu Tyr Asp Gln Glu Gly	Ser Tyr Pro Tyr Phe Ile	
425	430	435
Gly Val Ser Leu Gly Ser Ile Ile Val	Ile Val Phe Phe Val Ile	
440	445	450
Phe Ile Lys His Leu Ile His Ser Gln	Ile Pro Ala Leu Gln Asp	
455	460	465
Met His Ala Glu Ile Ala Gln Pro Leu	Leu Gln Ala	
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<210> 453
 <211> 1674
 <212> DNA
 <213> Homo Sapien

<400> 453
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 gctccagttt ggaagagaag attgctgctg tctttgatct tgaatattat 700
 gtccatcaga tggacaatgc gcaggacctg ctttcctttg gtggtcttca 750
 agtgggtgatc aatgggctga acagcacaga gccctcgtg aaggagtatg 800
 ctgcgtttgt gctgggcgct gccttttcca gcaaccccaa ggtccagggtg 850
 gaggccatcg aagggggagc cctgcagaag ctgctggtca tcctggccac 900

ggagcagccg ctcaactgcaa agaagaaggt cctgtttgca ctgtgctccc 950
 tgctgcgccca cttccctat gccagcggc agttcctgaa gctcgggggg 1000
 ctgcaggtcc tgaggaccct ggtgcaggag aagggcacgg aggtgctcgc 1050
 cgtgcgcgtg gtcacactgc tctacgacct ggtcacggag aagatgttcg 1100
 ccgaggagga ggctgagctg acccaggaga tgtcccaga gaagctgcag 1150
 cagtatcgcc aggtacacct cctgccaggc ctgtgggaac agggctggtg 1200
 cgagatcacg gccacctcc tggcgtgcc cgagcatgat gcccgtaga 1250
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 cgtcaggacc ccagctcgg caggacactg gccagcctgc aggtgagta 1350
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 ccagcgtggg tgggcttctc aggcaggagg acatcttggc agtgctggct 1550
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 aaaaaaaaaa aaaaaaaaaa aaaa 1674

<210> 454
 <211> 461
 <212> PRT
 <213> Homo Sapien

<400> 454
 Met Ala Pro Gln Ser Leu Pro Ser Ser Arg Met Ala Pro Leu Gly
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 20 25 30
 Ser His Gln Asn Leu Lys Glu Phe Ala Leu Thr Asn Pro Glu Lys
 35 40 45
 Ser Ser Thr Lys Glu Thr Glu Arg Lys Glu Thr Lys Ala Glu Glu
 50 55 60
 Glu Leu Asp Ala Glu Val Leu Glu Val Phe His Pro Thr His Glu
 65 70 75
 Trp Gln Ala Leu Gln Pro Gly Gln Ala Val Pro Ala Gly Ser His
 80 85 90
 Val Arg Leu Asn Leu Gln Thr Gly Glu Arg Glu Ala Lys Leu Gln
 95 100 105

Tyr	Glu	Asp	Lys	Phe	Arg	Asn	Asn	Leu	Lys	Gly	Lys	Arg	Leu	Asp	110	115	120
Ile	Asn	Thr	Asn	Thr	Tyr	Thr	Ser	Gln	Asp	Leu	Lys	Ser	Ala	Leu	125	130	135
Ala	Lys	Phe	Lys	Glu	Gly	Ala	Glu	Met	Glu	Ser	Ser	Lys	Glu	Asp	140	145	150
Lys	Ala	Arg	Gln	Ala	Glu	Val	Lys	Arg	Leu	Phe	Arg	Pro	Ile	Glu	155	160	165
Glu	Leu	Lys	Lys	Asp	Phe	Asp	Glu	Leu	Asn	Val	Val	Ile	Glu	Thr	170	175	180
Asp	Met	Gln	Ile	Met	Val	Arg	Leu	Ile	Asn	Lys	Phe	Asn	Ser	Ser	185	190	195
Ser	Ser	Ser	Leu	Glu	Glu	Lys	Ile	Ala	Ala	Leu	Phe	Asp	Leu	Glu	200	205	210
Tyr	Tyr	Val	His	Gln	Met	Asp	Asn	Ala	Gln	Asp	Leu	Leu	Ser	Phe	215	220	225
Gly	Gly	Leu	Gln	Val	Val	Ile	Asn	Gly	Leu	Asn	Ser	Thr	Glu	Pro	230	235	240
Leu	Val	Lys	Glu	Tyr	Ala	Ala	Phe	Val	Leu	Gly	Ala	Ala	Phe	Ser	245	250	255
Ser	Asn	Pro	Lys	Val	Gln	Val	Glu	Ala	Ile	Glu	Gly	Gly	Ala	Leu	260	265	270
Gln	Lys	Leu	Leu	Val	Ile	Leu	Ala	Thr	Glu	Gln	Pro	Leu	Thr	Ala	275	280	285
Lys	Lys	Lys	Val	Leu	Phe	Ala	Leu	Cys	Ser	Leu	Leu	Arg	His	Phe	290	295	300
Pro	Tyr	Ala	Gln	Arg	Gln	Phe	Leu	Lys	Leu	Gly	Gly	Leu	Gln	Val	305	310	315
Leu	Arg	Thr	Leu	Val	Gln	Glu	Lys	Gly	Thr	Glu	Val	Leu	Ala	Val	320	325	330
Arg	Val	Val	Thr	Leu	Leu	Tyr	Asp	Leu	Val	Thr	Glu	Lys	Met	Phe	335	340	345
Ala	Glu	Glu	Glu	Ala	Glu	Leu	Thr	Gln	Glu	Met	Ser	Pro	Glu	Lys	350	355	360
Leu	Gln	Gln	Tyr	Arg	Gln	Val	His	Leu	Leu	Pro	Gly	Leu	Trp	Glu	365	370	375
Gln	Gly	Trp	Cys	Glu	Ile	Thr	Ala	His	Leu	Leu	Ala	Leu	Pro	Glu	380	385	390
His	Asp	Ala	Arg	Glu	Lys	Val	Leu	Gln	Thr	Leu	Gly	Val	Leu	Leu			

	395		400		405
Thr Thr Cys Arg Asp Arg Tyr Arg Gln Asp Pro Gln Leu Gly Arg					
	410		415		420
Thr Leu Ala Ser Leu Gln Ala Glu Tyr Gln Val Leu Ala Ser Leu					
	425		430		435
Glu Leu Gln Asp Gly Glu Asp Glu Gly Tyr Phe Gln Glu Leu Leu					
	440		445		450
Gly Ser Val Asn Ser Leu Leu Lys Glu Leu Arg					
	455		460		

<210> 455
 <211> 1570
 <212> DNA
 <213> Homo Sapien

<400> 455
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 ctggtgaggg tggctcagca ggcagggaag gagaggtgtc tgtgcgtcct 200
 gcacccacat ctttctctgt cccctccttg ccctgtctgg aggctgctag 250
 actcctatct tctgaattct atagtgcctg ggtctcagcg cagtgccgat 300
 ggtggcccggt ccttgtggtt cctctctacc tggggaaata aggtgcagcg 350
 gccatggcta cagcaagacc cccctggatg tgggtgctct gtgctctgat 400
 cacagccttg cttctggggg tcacagagca tgttctcgcc aacaatgatg 450
 tttcctgtga ccaccctct aacaccgtgc cctctgggag caaccaggac 500
 ctgggagctg gggccgggga agacgcccgg tcggatgaca gcagcagccg 550
 catcatcaat ggatccgact gcgatatgca caccagccg tggcaggccg 600
 cgctgttgct aaggcccaac cagctctact gcggggcggt gttggtgeat 650
 ccacagtggc tgctcacggc cgccactgc aggaagaaag ttttcagagt 700
 ccgtctcggc cactactccc tgtcaccagt ttatgaatct gggcagcaga 750
 tgttccaggg ggtcaaactc atccccacc ctggctactc ccaccctggc 800
 cactctaacy acctcatgct catcaaactg aacagaagaa ttcgtcccac 850
 taaagatgtc agaccatca acgtctctc tcattgtccc tctgctggga 900
 caaagtgctt ggtgtctggc tgggggacaa ccaagagccc ccaagtgcac 950


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ttccctaagg tctccagtg cttgaatatc agcgtgctaa gtcagaaaag 1000
gtgcgaggat gcttaccoga gacagataga tgacaccatg ttctgcgccg 1050
gtgacaaagc aggtagagac tctgccagg gtgattctgg ggggcctgtg 1100
gtctgcaatg gctccctgca gggactcgtg tctggggag attacccttg 1150
tgcccgcccc aacagaccgg gtgtctacac gaacctctgc aagttcacca 1200
agtggatcca ggaaaccatc caggccaact cctgagtcac cccaggactc 1250
agcacaccgg catccccacc tgctgcaggg acagccctga cactcctttc 1300
agaccctcat tccttcccag agatgttgag aatgttcac tctccagccc 1350
ctgaccccat gtctcctgga ctcagggtct gcttccccca cattgggctg 1400
accgtgtctc tctagttgaa ccctgggaac aatttccaaa actgtccagg 1450
gcggggggtg cgtctcaatc tccctggggc actttcatcc tcaagctcag 1500
ggcccatccc ttctctgcag ctctgaccca aatttagtcc cagaaataaa 1550
ctgagaagtg gaaaaaaaaa 1570

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<210> 456

<211> 293

<212> PRT

<213> Homo Sapien

<400> 456

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Met Ala Thr Ala Arg Pro Pro Trp Met Trp Val Leu Cys Ala Leu
  1                      5                      10                      15

Ile Thr Ala Leu Leu Leu Gly Val Thr Glu His Val Leu Ala Asn
                      20                      25                      30

Asn Asp Val Ser Cys Asp His Pro Ser Asn Thr Val Pro Ser Gly
                      35                      40                      45

Ser Asn Gln Asp Leu Gly Ala Gly Ala Gly Glu Asp Ala Arg Ser
                      50                      55                      60

Asp Asp Ser Ser Ser Arg Ile Ile Asn Gly Ser Asp Cys Asp Met
                      65                      70                      75

His Thr Gln Pro Trp Gln Ala Ala Leu Leu Leu Arg Pro Asn Gln
                      80                      85                      90

Leu Tyr Cys Gly Ala Val Leu Val His Pro Gln Trp Leu Leu Thr
                      95                      100                     105

Ala Ala His Cys Arg Lys Lys Val Phe Arg Val Arg Leu Gly His
                      110                      115                      120

Tyr Ser Leu Ser Pro Val Tyr Glu Ser Gly Gln Gln Met Phe Gln
                      125                      130                      135

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Gly Val Lys Ser	Ile Pro His Pro Gly	Tyr Ser His Pro Gly	His
	140	145	150
Ser Asn Asp Leu	Met Leu Ile Lys Leu	Asn Arg Arg Ile Arg	Pro
	155	160	165
Thr Lys Asp Val	Arg Pro Ile Asn Val	Ser Ser His Cys Pro	Ser
	170	175	180
Ala Gly Thr Lys	Cys Leu Val Ser Gly	Trp Gly Thr Thr Lys	Ser
	185	190	195
Pro Gln Val His	Phe Pro Lys Val Leu	Gln Cys Leu Asn Ile	Ser
	200	205	210
Val Leu Ser Gln	Lys Arg Cys Glu Asp	Ala Tyr Pro Arg Gln	Ile
	215	220	225
Asp Asp Thr Met	Phe Cys Ala Gly Asp	Lys Ala Gly Arg Asp	Ser
	230	235	240
Cys Gln Gly Asp	Ser Gly Gly Pro Val	Val Cys Asn Gly Ser	Leu
	245	250	255
Gln Gly Leu Val	Ser Trp Gly Asp Tyr	Pro Cys Ala Arg Pro	Asn
	260	265	270
Arg Pro Gly Val	Tyr Thr Asn Leu Cys	Lys Phe Thr Lys Trp	Ile
	275	280	285
Gln Glu Thr Ile	Gln Ala Asn Ser		
	290		

<210> 457
 <211> 1841
 <212> DNA
 <213> Homo Sapien

<400> 457
 gcagtcagag acttccccctg cccctcgctg ggaaagaaca ttaggaatgc 50
 ctttttagtgc cttgcttcct gaactagctc acagtagccc ggcggcccag 100
 ggcaatccga ccacatttca ctctcaccgc tgtaggaatc cagatgcagg 150
 ccaagtacag cagcacgagg gacatgctgg atgatgatgg ggacaccacc 200
 atgagcctgc attctcaagc ctctgccaca actcggcatc cagagccccg 250
 gcgcacagag cacagggctc cctcttcaac gtggcgacca gtggccctga 300
 ccctgctgac tttgtgcttg gtgctgctga tagggctggc agccctgggg 350
 cttttgtttt ttcagtacta ccagctctcc aatactgggtc aagacaccat 400
 ttctcaaagtg gaagaaagat taggaaatac gtccaagag ttgcaatctc 450
 ttcaagtcca gaatataaag cttgcaggaa gtctgcagca tgtggctgaa 500

<400> 458

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Gly	Asp	Thr	Thr	Met	Ser	Leu	His	Ser	Gln	Ala	Ser	Ala	Thr	Thr
				20					25					30
Arg	His	Pro	Glu	Pro	Arg	Arg	Thr	Glu	His	Arg	Ala	Pro	Ser	Ser
				35					40					45
Thr	Trp	Arg	Pro	Val	Ala	Leu	Thr	Leu	Leu	Thr	Leu	Cys	Leu	Val
				50					55					60
Leu	Leu	Ile	Gly	Leu	Ala	Ala	Leu	Gly	Leu	Leu	Phe	Phe	Gln	Tyr
				65					70					75
Tyr	Gln	Leu	Ser	Asn	Thr	Gly	Gln	Asp	Thr	Ile	Ser	Gln	Met	Glu
				80					85					90
Glu	Arg	Leu	Gly	Asn	Thr	Ser	Gln	Glu	Leu	Gln	Ser	Leu	Gln	Val
				95					100					105
Gln	Asn	Ile	Lys	Leu	Ala	Gly	Ser	Leu	Gln	His	Val	Ala	Glu	Lys
				110					115					120
Leu	Cys	Arg	Glu	Leu	Tyr	Asn	Lys	Ala	Gly	Ala	His	Arg	Cys	Ser
				125					130					135
Pro	Cys	Thr	Glu	Gln	Trp	Lys	Trp	His	Gly	Asp	Asn	Cys	Tyr	Gln
				140					145					150
Phe	Tyr	Lys	Asp	Ser	Lys	Ser	Trp	Glu	Asp	Cys	Lys	Tyr	Phe	Cys
				155					160					165
Leu	Ser	Glu	Asn	Ser	Thr	Met	Leu	Lys	Ile	Asn	Lys	Gln	Glu	Asp
				170					175					180
Leu	Glu	Phe	Ala	Ala	Ser	Gln	Ser	Tyr	Ser	Glu	Phe	Phe	Tyr	Ser
				185					190					195
Tyr	Trp	Thr	Gly	Leu	Leu	Arg	Pro	Asp	Ser	Gly	Lys	Ala	Trp	Leu
				200					205					210
Trp	Met	Asp	Gly	Thr	Pro	Phe	Thr	Ser	Glu	Leu	Phe	His	Ile	Ile
				215					220					225
Ile	Asp	Val	Thr	Ser	Pro	Arg	Ser	Arg	Asp	Cys	Val	Ala	Ile	Leu
				230					235					240
Asn	Gly	Met	Ile	Phe	Ser	Lys	Asp	Cys	Lys	Glu	Leu	Lys	Arg	Cys
				245					250					255
Val	Cys	Glu	Arg	Arg	Ala	Gly	Met	Val	Lys	Pro	Glu	Ser	Leu	His
				260					265					270
Val	Pro	Pro	Glu	Thr	Leu	Gly	Glu	Gly	Asp					
				275					280					

<210> 459
<211> 1337
<212> DNA
<213> Homo Sapien

<400> 459
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actgcatcta gaggagggcc gtctgtgagg ccactacccc tccagcaact 150
gggaggtggg actgtcagaa gctggcccag ggtggtggtc agctgggtca 200
gggacctacg gcacctgctg gaccacctcg ccttctccat cgaagcaggg 250
aagtgggagc ctcgagccct cgggtggaag ctgaccccaa gccacccttc 300
acctggacag gatgagagtg tcaggtgtgc ttgcctcctt ggccctcatc 350
tttgccatag tcacgacatg gatgtttatt cgaagctaca tgagcttcag 400
catgaaaacc atccgtctgc cacgctggct ggagcctcg cccaccaagg 450
agatccaggt taaaaagtac aagtgtggcc tcatcaagcc ctgccagcc 500
aactactttg cgtttaaaat ctgcagtggg gccgccaacg tcgtggggcc 550
tactatgtgc tttgaagacc gcatgatcat gagtctgtg aaaaacaatg 600
tgggcagagg cctaaacatc gccctggtga atggaaccac gggagctgtg 650
ctgggacaga aggcatttga catgtactct ggagatgtta tgcacctagt 700
gaaattcctt aaagaaattc cggggggtgc actggtgctg gtggcctcct 750
acgacgatec agggaccaa atgaacgatg aaagcaggaa actcttctct 800
gacttgggga gttctacgc aaaacaactg ggcttccggg acagctgggt 850
cttcatagga gccaaagacc tcaggggtaa aagcccctt gagcagttct 900
taaagaacag ccagacaca aacaaatagc agggatggcc agagctgctg 950
gagatggagg gctgcatgcc ccgaagcca ttttaggtg gctgtggctc 1000
ttcctcagcc aggggcctga agaagctcct gcctgactta ggagtcagag 1050
ccgggcaggg gctgaggagg aggagcaggg ggtgctgctg ggaaggctgt 1100
gcaggtcctt gcacgtgtg tcgcgctct cctcctcgga aacagaacct 1150
tcccacagca catcctaccc ggaagaccag cctcagaggg tccttctgga 1200
accagctgtc tgtggagaga atggggtgct ttctcaggg actgctgacg 1250
gctggtcctg aggaaggaca aactgccag acttgagccc aattaaattt 1300

tatttttgct ggttttgaaa aaaaaaaaaa aaaaaaa 1337

<210> 460

<211> 224

<212> PRT

<213> Homo Sapien

<400> 460

Met Arg Val Ser Gly Val Leu Arg Leu Leu Ala Leu Ile Phe Ala
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Ile Val Thr Thr Trp Met Phe Ile Arg Ser Tyr Met Ser Phe Ser
20 25 30

Met Lys Thr Ile Arg Leu Pro Arg Trp Leu Ala Ala Ser Pro Thr
35 40 45

Lys Glu Ile Gln Val Lys Lys Tyr Lys Cys Gly Leu Ile Lys Pro
50 55 60

Cys Pro Ala Asn Tyr Phe Ala Phe Lys Ile Cys Ser Gly Ala Ala
65 70 75

Asn Val Val Gly Pro Thr Met Cys Phe Glu Asp Arg Met Ile Met
80 85 90

Ser Pro Val Lys Asn Asn Val Gly Arg Gly Leu Asn Ile Ala Leu
95 100 105

Val Asn Gly Thr Thr Gly Ala Val Leu Gly Gln Lys Ala Phe Asp
110 115 120

Met Tyr Ser Gly Asp Val Met His Leu Val Lys Phe Leu Lys Glu
125 130 135

Ile Pro Gly Gly Ala Leu Val Leu Val Ala Ser Tyr Asp Asp Pro
140 145 150

Gly Thr Lys Met Asn Asp Glu Ser Arg Lys Leu Phe Ser Asp Leu
155 160 165

Gly Ser Ser Tyr Ala Lys Gln Leu Gly Phe Arg Asp Ser Trp Val
170 175 180

Phe Ile Gly Ala Lys Asp Leu Arg Gly Lys Ser Pro Phe Glu Gln
185 190 195

Phe Leu Lys Asn Ser Pro Asp Thr Asn Lys Tyr Glu Gly Trp Pro
200 205 210

Glu Leu Leu Glu Met Glu Gly Cys Met Pro Pro Lys Pro Phe
215 220

<210> 461

<211> 2528

<212> DNA

<213> Homo Sapien

<400> 461

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gccccaggac atgcagaacc ttcctctaga acccgaccca ccaccatgag 150
gtcctgcctg tggagatgca ggcacctgag ccaaggcgtc cagtggctct 200
tgcttctggc tgtcctggtc ttctttctct tgccttgcc ctcttttatt 250
aaggagcctc aaacaaagcc ttccaggcat caacgcacag agaacattaa 300
agaaaggctc ctacagtccc tggcaaagcc taagtcccag gcacccacaa 350
gggcgaggag gacaaccatc tatgcagagc cagcgccaga gaacaatgcc 400
ctcaacacac aaaccagcc caaggccac accaccggag acagaggaaa 450
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cacagagggc agcatggaag agcccagaaa aagagaaaac catggtgaac 550
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<211> 600
<212> PRT
<213> Homo Sapien

<400> 462
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Leu Pro Ser Phe Ile Lys Glu Pro Gln Thr Lys Pro Ser Arg His
35 40 45

Gln	Arg	Thr	Glu	Asn	Ile	Lys	Glu	Arg	Ser	Leu	Gln	Ser	Leu	Ala	
				50					55					60	
Lys	Pro	Lys	Ser	Gln	Ala	Pro	Thr	Arg	Ala	Arg	Arg	Thr	Thr	Ile	
				65					70					75	
Tyr	Ala	Glu	Pro	Ala	Pro	Glu	Asn	Asn	Ala	Leu	Asn	Thr	Gln	Thr	
				80					85					90	
Gln	Pro	Lys	Ala	His	Thr	Thr	Gly	Asp	Arg	Gly	Lys	Glu	Ala	Asn	
				95					100					105	
Gln	Ala	Pro	Pro	Glu	Glu	Gln	Asp	Lys	Val	Pro	His	Thr	Ala	Gln	
				110					115					120	
Arg	Ala	Ala	Trp	Lys	Ser	Pro	Glu	Lys	Glu	Lys	Thr	Met	Val	Asn	
				125					130					135	
Thr	Leu	Ser	Pro	Arg	Gly	Gln	Asp	Ala	Gly	Met	Ala	Ser	Gly	Arg	
				140					145					150	
Thr	Glu	Ala	Gln	Ser	Trp	Lys	Ser	Gln	Asp	Thr	Lys	Thr	Thr	Gln	
				155					160					165	
Gly	Asn	Gly	Gly	Gln	Thr	Arg	Lys	Leu	Thr	Ala	Ser	Arg	Thr	Val	
				170					175					180	
Ser	Glu	Lys	His	Gln	Gly	Lys	Ala	Ala	Thr	Thr	Ala	Lys	Thr	Leu	
				185					190					195	
Ile	Pro	Lys	Ser	Gln	His	Arg	Met	Leu	Ala	Pro	Thr	Gly	Ala	Val	
				200					205					210	
Ser	Thr	Arg	Thr	Arg	Gln	Lys	Gly	Val	Thr	Thr	Ala	Val	Ile	Pro	
				215					220					225	
Pro	Lys	Glu	Lys	Lys	Pro	Gln	Ala	Thr	Pro	Pro	Pro	Ala	Pro	Phe	
				230					235					240	
Gln	Ser	Pro	Thr	Thr	Gln	Arg	Asn	Gln	Arg	Leu	Lys	Ala	Ala	Asn	
				245					250					255	
Phe	Lys	Ser	Glu	Pro	Arg	Trp	Asp	Phe	Glu	Glu	Lys	Tyr	Ser	Phe	
				260					265					270	
Glu	Ile	Gly	Gly	Leu	Gln	Thr	Thr	Cys	Pro	Asp	Ser	Val	Lys	Ile	
				275					280					285	
Lys	Ala	Ser	Lys	Ser	Leu	Trp	Leu	Gln	Lys	Leu	Phe	Leu	Pro	Asn	
				290					295					300	
Leu	Thr	Leu	Phe	Leu	Asp	Ser	Arg	His	Phe	Asn	Gln	Ser	Glu	Trp	
				305					310					315	
Asp	Arg	Leu	Glu	His	Phe	Ala	Pro	Pro	Phe	Gly	Phe	Met	Glu	Leu	
				320					325					330	
Asn	Tyr	Ser	Leu	Val	Gln	Lys	Val	Val	Thr	Arg	Phe	Pro	Pro	Val	

335	340	345
Pro Gln Gln Gln Leu Leu Leu Ala Ser Leu Pro Ala Gly Ser Leu		
350	355	360
Arg Cys Ile Thr Cys Ala Val Val Gly Asn Gly Gly Ile Leu Asn		
365	370	375
Asn Ser His Met Gly Gln Glu Ile Asp Ser His Asp Tyr Val Phe		
380	385	390
Arg Leu Ser Gly Ala Leu Ile Lys Gly Tyr Glu Gln Asp Val Gly		
395	400	405
Thr Arg Thr Ser Phe Tyr Gly Phe Thr Ala Phe Ser Leu Thr Gln		
410	415	420
Ser Leu Leu Ile Leu Gly Asn Arg Gly Phe Lys Asn Val Pro Leu		
425	430	435
Gly Lys Asp Val Arg Tyr Leu His Phe Leu Glu Gly Thr Arg Asp		
440	445	450
Tyr Glu Trp Leu Glu Ala Leu Leu Met Asn Gln Thr Val Met Ser		
455	460	465
Lys Asn Leu Phe Trp Phe Arg His Arg Pro Gln Glu Ala Phe Arg		
470	475	480
Glu Ala Leu His Met Asp Arg Tyr Leu Leu Leu His Pro Asp Phe		
485	490	495
Leu Arg Tyr Met Lys Asn Arg Phe Leu Arg Ser Lys Thr Leu Asp		
500	505	510
Gly Ala His Trp Arg Ile Tyr Arg Pro Thr Thr Gly Ala Leu Leu		
515	520	525
Leu Leu Thr Ala Leu Gln Leu Cys Asp Gln Val Ser Ala Tyr Gly		
530	535	540
Phe Ile Thr Glu Gly His Glu Arg Phe Ser Asp His Tyr Tyr Asp		
545	550	555
Thr Ser Trp Lys Arg Leu Ile Phe Tyr Ile Asn His Asp Phe Lys		
560	565	570
Leu Glu Arg Glu Val Trp Lys Arg Leu His Asp Glu Gly Ile Ile		
575	580	585
Arg Leu Tyr Gln Arg Pro Gly Pro Gly Thr Ala Lys Ala Lys Asn		
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<210> 463
 <211> 3226
 <212> DNA
 <213> Homo Sapien

<400> 463

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 <211> 941
 <212> PRT
 <213> Homo Sapien

<400> 464
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 35 40 45
 Pro Phe Pro Trp Asn Lys Ile Arg Leu Pro Glu Tyr Val Ile Pro
 50 55 60
 Val His Tyr Asp Leu Leu Ile His Ala Asn Leu Thr Thr Leu Thr
 65 70 75
 Phe Trp Gly Thr Thr Lys Val Glu Ile Thr Ala Ser Gln Pro Thr
 80 85 90
 Ser Thr Ile Ile Leu His Ser His His Leu Gln Ile Ser Arg Ala
 95 100 105
 Thr Leu Arg Lys Gly Ala Gly Glu Arg Leu Ser Glu Glu Pro Leu
 110 115 120
 Gln Val Leu Glu His Pro Pro Gln Glu Gln Ile Ala Leu Leu Ala
 125 130 135
 Pro Glu Pro Leu Leu Val Gly Leu Pro Tyr Thr Val Val Ile His
 140 145 150
 Tyr Ala Gly Asn Leu Ser Glu Thr Phe His Gly Phe Tyr Lys Ser
 155 160 165
 Thr Tyr Arg Thr Lys Glu Gly Glu Leu Arg Ile Leu Ala Ser Thr
 170 175 180
 Gln Phe Glu Pro Thr Ala Ala Arg Met Ala Phe Pro Cys Phe Asp
 185 190 195

Glu	Pro	Ala	Phe	Lys	Ala	Ser	Phe	Ser	Ile	Lys	Ile	Arg	Arg	Glu	
				200					205					210	
Pro	Arg	His	Leu	Ala	Ile	Ser	Asn	Met	Pro	Leu	Val	Lys	Ser	Val	
				215					220					225	
Thr	Val	Ala	Glu	Gly	Leu	Ile	Glu	Asp	His	Phe	Asp	Val	Thr	Val	
				230					235					240	
Lys	Met	Ser	Thr	Tyr	Leu	Val	Ala	Phe	Ile	Ile	Ser	Asp	Phe	Glu	
				245					250					255	
Ser	Val	Ser	Lys	Ile	Thr	Lys	Ser	Gly	Val	Lys	Val	Ser	Val	Tyr	
				260					265					270	
Ala	Val	Pro	Asp	Lys	Ile	Asn	Gln	Ala	Asp	Tyr	Ala	Leu	Asp	Ala	
				275					280					285	
Ala	Val	Thr	Leu	Leu	Glu	Phe	Tyr	Glu	Asp	Tyr	Phe	Ser	Ile	Pro	
				290					295					300	
Tyr	Pro	Leu	Pro	Lys	Gln	Asp	Leu	Ala	Ala	Ile	Pro	Asp	Phe	Gln	
				305					310					315	
Ser	Gly	Ala	Met	Glu	Asn	Trp	Gly	Leu	Thr	Thr	Tyr	Arg	Glu	Ser	
				320					325					330	
Ala	Leu	Leu	Phe	Asp	Ala	Glu	Lys	Ser	Ser	Ala	Ser	Ser	Lys	Leu	
				335					340					345	
Gly	Ile	Thr	Val	Thr	Val	Ala	His	Glu	Leu	Ala	His	Gln	Trp	Phe	
				350					355					360	
Gly	Asn	Leu	Val	Thr	Met	Glu	Trp	Trp	Asn	Asp	Leu	Trp	Leu	Asn	
				365					370					375	
Glu	Gly	Phe	Ala	Lys	Phe	Met	Glu	Phe	Val	Ser	Val	Ser	Val	Thr	
				380					385					390	
His	Pro	Glu	Leu	Lys	Val	Gly	Asp	Tyr	Phe	Phe	Gly	Lys	Cys	Phe	
				395					400					405	
Asp	Ala	Met	Glu	Val	Asp	Ala	Leu	Asn	Ser	Ser	His	Pro	Val	Ser	
				410					415					420	
Thr	Pro	Val	Glu	Asn	Pro	Ala	Gln	Ile	Arg	Glu	Met	Phe	Asp	Asp	
				425					430					435	
Val	Ser	Tyr	Asp	Lys	Gly	Ala	Cys	Ile	Leu	Asn	Met	Leu	Arg	Glu	
				440					445					450	
Tyr	Leu	Ser	Ala	Asp	Ala	Phe	Lys	Ser	Gly	Ile	Val	Gln	Tyr	Leu	
				455					460					465	
Gln	Lys	His	Ser	Tyr	Lys	Asn	Thr	Lys	Asn	Glu	Asp	Leu	Trp	Asp	
				470					475					480	
Ser	Met	Ala	Ser	Ile	Cys	Pro	Thr	Asp	Gly	Val	Lys	Gly	Met	Asp	

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Gly Phe Cys Ser	Arg Ser Gln His Ser	Ser Ser Ser Ser Ser	His Trp		
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His Gln Glu Gly	Val Asp Val Lys Thr	Met Met Asn Thr Trp	Thr		
	515		520		525
Leu Gln Arg Gly	Phe Pro Leu Ile Thr	Ile Thr Val Arg Gly	Arg		
	530		535		540
Asn Val His Met	Lys Gln Glu His Tyr	Met Lys Gly Ser Asp	Gly		
	545		550		555
Ala Pro Asp Thr	Gly Tyr Leu Trp His	Val Pro Leu Thr Phe	Ile		
	560		565		570
Thr Ser Lys Ser	Asn Met Val His Arg	Phe Leu Leu Lys Thr	Lys		
	575		580		585
Thr Asp Val Leu	Ile Leu Pro Glu Glu	Val Glu Trp Ile Lys	Phe		
	590		595		600
Asn Val Gly Met	Asn Gly Tyr Tyr Ile	Val His Tyr Glu Asp	Asp		
	605		610		615
Gly Trp Asp Ser	Leu Thr Gly Leu Leu	Lys Gly Thr His Thr	Ala		
	620		625		630
Val Ser Ser Asn	Asp Arg Ala Ser Leu	Ile Asn Asn Ala Phe	Gln		
	635		640		645
Leu Val Ser Ile	Gly Lys Leu Ser Ile	Glu Lys Ala Leu Asp	Leu		
	650		655		660
Ser Leu Tyr Leu	Lys His Glu Thr Glu	Ile Met Pro Val Phe	Gln		
	665		670		675
Gly Leu Asn Glu	Leu Ile Pro Met Tyr	Lys Leu Met Glu Lys	Arg		
	680		685		690
Asp Met Asn Glu	Val Glu Thr Gln Phe	Lys Ala Phe Leu Ile	Arg		
	695		700		705
Leu Leu Arg Asp	Leu Ile Asp Lys Gln	Thr Trp Thr Asp Glu	Gly		
	710		715		720
Ser Val Ser Glu	Gln Met Leu Arg Ser	Glu Leu Leu Leu Leu	Ala		
	725		730		735
Cys Val His Asn	Tyr Gln Pro Cys Val	Gln Arg Ala Glu Gly	Tyr		
	740		745		750
Phe Arg Lys Trp	Lys Glu Ser Asn Gly	Asn Leu Ser Leu Pro	Val		
	755		760		765
Asp Val Thr Leu	Ala Val Phe Ala Val	Gly Ala Gln Ser Thr	Glu		
	770		775		780

Gly	Trp	Asp	Phe	Leu	Tyr	Ser	Lys	Tyr	Gln	Phe	Ser	Leu	Ser	Ser	785	790	795
Thr	Glu	Lys	Ser	Gln	Ile	Glu	Phe	Ala	Leu	Cys	Arg	Thr	Gln	Asn	800	805	810
Lys	Glu	Lys	Leu	Gln	Trp	Leu	Leu	Asp	Glu	Ser	Phe	Lys	Gly	Asp	815	820	825
Lys	Ile	Lys	Thr	Gln	Glu	Phe	Pro	Gln	Ile	Leu	Thr	Leu	Ile	Gly	830	835	840
Arg	Asn	Pro	Val	Gly	Tyr	Pro	Leu	Ala	Trp	Gln	Phe	Leu	Arg	Lys	845	850	855
Asn	Trp	Asn	Lys	Leu	Val	Gln	Lys	Phe	Glu	Leu	Gly	Ser	Ser	Ser	860	865	870
Ile	Ala	His	Met	Val	Met	Gly	Thr	Thr	Asn	Gln	Phe	Ser	Thr	Arg	875	880	885
Thr	Arg	Leu	Glu	Glu	Val	Lys	Gly	Phe	Phe	Ser	Ser	Leu	Lys	Glu	890	895	900
Asn	Gly	Ser	Gln	Leu	Arg	Cys	Val	Gln	Gln	Thr	Ile	Glu	Thr	Ile	905	910	915
Glu	Glu	Asn	Ile	Gly	Trp	Met	Asp	Lys	Asn	Phe	Asp	Lys	Ile	Arg	920	925	930
Val	Trp	Leu	Gln	Ser	Glu	Lys	Leu	Glu	Arg	Met					935	940	

<210> 465
 <211> 1587
 <212> DNA
 <213> Homo Sapien

<400> 465
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 gaacaccagc tgcgacagcg gcttgggggtg ccaggacacg ttgatgctca 200
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 gccaaaggacc aggagccccg cgctactgag caccggatgg gccccggcct 300
 ctccctgata tctacacct tcgtgtgccg ccaggaggac ttctgcaaca 350
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 ggatccttga ggtgcccagt ctgcttgtct atggaaggct gtctggaggg 450
 gacaacagaa gagatctgcc ccaaggggac cacacactgt tatgatggcc 500

tcctcaggct caggggagga ggcattctct ccaatctgag agtccagggg 550
 tgcattcccc agccagggtt caacctgtct aatgggacac aggaaattgg 600
 gcccggtgggt atgactgaga actgcaatag gaaagatttt ctgacctgtc 650
 atcggggggac caccattatg acacacggaa acttgggtca agaaccct 700
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 ggagacgctg ctgctcatag atgtaggact cacatcaacc ctgggtgggga 800
 caaaaggctg cagcactgtt ggggctcaaa attcccagaa gaccaccatc 850
 cactcagccc ctcttgggggt gcttgtggcc tcctataccc acttctgtct 900
 ctcggaacctg tgcaatagtg ccagcagcag cagcgttctg ctgaactccc 950
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 gcctggagtc tctcaattgg ggggtggggc tggcactggc cccagcgtg 1300
 tgggtggggag tggtttgccc ttctgtctaa ctctattacc cccacgattc 1350
 ttcaccgctg ctgaccaccc aactcaacc tcctctgac ctcataacct 1400
 aatggccttg gacaccagat tctttcccat tctgtccatg aatcatcttc 1450
 cccacacaca atcattcata tctactcacc taacagcaac actggggaga 1500
 gcctggagca tccggacttg ccctatggga gaggggacgc tggaggagtg 1550
 gctgcatgta tctgataata cagacctgt cctttca 1587

<210> 466

<211> 437

<212> PRT

<213> Homo Sapien

<400> 466

Met	Ser	Ala	Val	Leu	Leu	Ala	Leu	Leu	Gly	Phe	Ile	Leu	Pro
1				5				10				15	
Leu	Pro	Gly	Val	Gln	Ala	Leu	Leu	Cys	Gln	Phe	Gly	Thr	Val
				20				25				30	
His	Val	Trp	Lys	Val	Ser	Asp	Leu	Pro	Arg	Gln	Trp	Thr	Pro
				35				40				45	

Asn	Thr	Ser	Cys	Asp	Ser	Gly	Leu	Gly	Cys	Gln	Asp	Thr	Leu	Met	50	55	60
Leu	Ile	Glu	Ser	Gly	Pro	Gln	Val	Ser	Leu	Val	Leu	Ser	Lys	Gly	65	70	75
Cys	Thr	Glu	Ala	Lys	Asp	Gln	Glu	Pro	Arg	Val	Thr	Glu	His	Arg	80	85	90
Met	Gly	Pro	Gly	Leu	Ser	Leu	Ile	Ser	Tyr	Thr	Phe	Val	Cys	Arg	95	100	105
Gln	Glu	Asp	Phe	Cys	Asn	Asn	Leu	Val	Asn	Ser	Leu	Pro	Leu	Trp	110	115	120
Ala	Pro	Gln	Pro	Pro	Ala	Asp	Pro	Gly	Ser	Leu	Arg	Cys	Pro	Val	125	130	135
Cys	Leu	Ser	Met	Glu	Gly	Cys	Leu	Glu	Gly	Thr	Thr	Glu	Glu	Ile	140	145	150
Cys	Pro	Lys	Gly	Thr	Thr	His	Cys	Tyr	Asp	Gly	Leu	Leu	Arg	Leu	155	160	165
Arg	Gly	Gly	Gly	Ile	Phe	Ser	Asn	Leu	Arg	Val	Gln	Gly	Cys	Met	170	175	180
Pro	Gln	Pro	Gly	Cys	Asn	Leu	Leu	Asn	Gly	Thr	Gln	Glu	Ile	Gly	185	190	195
Pro	Val	Gly	Met	Thr	Glu	Asn	Cys	Asn	Arg	Lys	Asp	Phe	Leu	Thr	200	205	210
Cys	His	Arg	Gly	Thr	Thr	Ile	Met	Thr	His	Gly	Asn	Leu	Ala	Gln	215	220	225
Glu	Pro	Thr	Asp	Trp	Thr	Thr	Ser	Asn	Thr	Glu	Met	Cys	Glu	Val	230	235	240
Gly	Gln	Val	Cys	Gln	Glu	Thr	Leu	Leu	Leu	Ile	Asp	Val	Gly	Leu	245	250	255
Thr	Ser	Thr	Leu	Val	Gly	Thr	Lys	Gly	Cys	Ser	Thr	Val	Gly	Ala	260	265	270
Gln	Asn	Ser	Gln	Lys	Thr	Thr	Ile	His	Ser	Ala	Pro	Pro	Gly	Val	275	280	285
Leu	Val	Ala	Ser	Tyr	Thr	His	Phe	Cys	Ser	Ser	Asp	Leu	Cys	Asn	290	295	300
Ser	Ala	Ser	Ser	Ser	Ser	Val	Leu	Leu	Asn	Ser	Leu	Pro	Pro	Gln	305	310	315
Ala	Ala	Pro	Val	Pro	Gly	Asp	Arg	Gln	Cys	Pro	Thr	Cys	Val	Gln	320	325	330
Pro	Leu	Gly	Thr	Cys	Ser	Ser	Gly	Ser	Pro	Arg	Met	Thr	Cys	Pro			

335	340	345
Arg Gly Ala Thr His Cys Tyr Asp Gly Tyr Ile His Leu Ser Gly		
350	355	360
Gly Gly Leu Ser Thr Lys Met Ser Ile Gln Gly Cys Val Ala Gln		
365	370	375
Pro Ser Ser Phe Leu Leu Asn His Thr Arg Gln Ile Gly Ile Phe		
380	385	390
Ser Ala Arg Glu Lys Arg Asp Val Gln Pro Pro Ala Ser Gln His		
395	400	405
Glu Gly Gly Gly Ala Glu Gly Leu Glu Ser Leu Thr Trp Gly Val		
410	415	420
Gly Leu Ala Leu Ala Pro Ala Leu Trp Trp Gly Val Val Cys Pro		
425	430	435

Ser Cys

<210> 467
 <211> 2475
 <212> DNA
 <213> Homo Sapien

<400> 467
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 gttccttgca gcttttctgc ccccgccgca gtgtaccag gacccagcca 200
 tggtgcatta catctaccag cgctttcgag tcttgagca agggctggaa 250
 aaatgtaccc aagcaacgag ggcatacatt caagaattcc aagagttctc 300
 aaaaaatata tctgtcatgc tgggaagatg tcagacctac acaagtgagt 350
 acaagagtgc agtgggtaac ttggcactga gagttgaacg tgcccaacgg 400
 gagattgact acatacaata ccttcgagag gctgacgagt gcatcgtatc 450
 agaggacaag aactggcag aaatggtgct ccaagaagct gaagaagaga 500
 aaaagatccg gactctgctg aatgcaagct gtgacaacat gctgatgggc 550
 ataaagtctt tgaaaatagt gaagaagatg atggacacac atggctcttg 600
 gatgaaagat gctgtctata actctccaaa ggtgtactta ttaattggat 650
 ccagaaacaa cactgtttgg gaatttgcaa acatacgggc attcatggag 700
 gataacacca agccagctcc ccggaagcaa atcctaacac tttcctggca 750

cattgccc aa ggaagcatca aatacgtatg tttgttcacc tactcttata 2250
gtcaatgcgt tcacgttttc agcctaaaaa taatagtctg tcccttttagc 2300
cagttttcat gtctgcacaa gacctttcaa taggcctttc aaatgataat 2350
tctccagaa aaccagtcta agggtagagga ccccaactct agcctcctct 2400
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gacactgagc aaaaaaaaaa aaaaa 2475

<210> 468

<211> 402

<212> PRT

<213> Homo Sapien

<400> 468

Met	Met	Val	Ala	Leu	Arg	Gly	Ala	Ser	Ala	Leu	Leu	Val	Leu	Phe	1	5	10	15
Leu	Ala	Ala	Phe	Leu	Pro	Pro	Pro	Gln	Cys	Thr	Gln	Asp	Pro	Ala	20	25	30	
Met	Val	His	Tyr	Ile	Tyr	Gln	Arg	Phe	Arg	Val	Leu	Glu	Gln	Gly	35	40	45	
Leu	Glu	Lys	Cys	Thr	Gln	Ala	Thr	Arg	Ala	Tyr	Ile	Gln	Glu	Phe	50	55	60	
Gln	Glu	Phe	Ser	Lys	Asn	Ile	Ser	Val	Met	Leu	Gly	Arg	Cys	Gln	65	70	75	
Thr	Tyr	Thr	Ser	Glu	Tyr	Lys	Ser	Ala	Val	Gly	Asn	Leu	Ala	Leu	80	85	90	
Arg	Val	Glu	Arg	Ala	Gln	Arg	Glu	Ile	Asp	Tyr	Ile	Gln	Tyr	Leu	95	100	105	
Arg	Glu	Ala	Asp	Glu	Cys	Ile	Val	Ser	Glu	Asp	Lys	Thr	Leu	Ala	110	115	120	
Glu	Met	Leu	Leu	Gln	Glu	Ala	Glu	Glu	Glu	Lys	Lys	Ile	Arg	Thr	125	130	135	
Leu	Leu	Asn	Ala	Ser	Cys	Asp	Asn	Met	Leu	Met	Gly	Ile	Lys	Ser	140	145	150	
Leu	Lys	Ile	Val	Lys	Lys	Met	Met	Asp	Thr	His	Gly	Ser	Trp	Met	155	160	165	
Lys	Asp	Ala	Val	Tyr	Asn	Ser	Pro	Lys	Val	Tyr	Leu	Leu	Ile	Gly	170	175	180	
Ser	Arg	Asn	Asn	Thr	Val	Trp	Glu	Phe	Ala	Asn	Ile	Arg	Ala	Phe	185	190	195	
Met	Glu	Asp	Asn	Thr	Lys	Pro	Ala	Pro	Arg	Lys	Gln	Ile	Leu	Thr				

Leu Ser Trp Gln Gly Thr Gly Gln Val	Ile Tyr Lys Gly Phe Leu	
215	220	225
Phe Phe His Asn Gln Ala Thr Ser Asn	Glu Ile Ile Lys Tyr Asn	
230	235	240
Leu Gln Lys Arg Thr Val Glu Asp Arg	Met Leu Leu Pro Gly Gly	
245	250	255
Val Gly Arg Ala Leu Val Tyr Gln His	Ser Pro Ser Thr Tyr Ile	
260	265	270
Asp Leu Ala Val Asp Glu His Gly Leu	Trp Ala Ile His Ser Gly	
275	280	285
Pro Gly Thr His Ser His Leu Val Leu	Thr Lys Ile Glu Pro Gly	
290	295	300
Thr Leu Gly Val Glu His Ser Trp Asp	Thr Pro Cys Arg Ser Gln	
305	310	315
Asp Ala Glu Ala Ser Phe Leu Leu Cys	Gly Val Leu Tyr Val Val	
320	325	330
Tyr Ser Thr Gly Gly Gln Gly Pro His	Arg Ile Thr Cys Ile Tyr	
335	340	345
Asp Pro Leu Gly Thr Ile Ser Glu Glu	Asp Leu Pro Asn Leu Phe	
350	355	360
Phe Pro Lys Arg Pro Arg Ser His Ser	Met Ile His Tyr Asn Pro	
365	370	375
Arg Asp Lys Gln Leu Tyr Ala Trp Asn	Glu Gly Asn Gln Ile Ile	
380	385	390
Tyr Lys Leu Gln Thr Lys Arg Lys Leu	Pro Leu Lys	
395	400	

<210> 469
 <211> 1415
 <212> DNA
 <213> Homo Sapien

<400> 469
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 gtgatcacag gggcctgtga gcgggatgtc cagtgtgggg caggcacctg 200
 ctgtgccatc agcctgtggc ttcgagggct gcggatgtgc accccgctgg 250
 ggcgggaagg cgaggagtgc caccocggca gccacaaggt ccccttcttc 300

Gln	Cys	Gly	Ala	Gly	Thr	Cys	Cys	Ala	Ile	Ser	Leu	Trp	Leu	Arg
				35					40					45
Gly	Leu	Arg	Met	Cys	Thr	Pro	Leu	Gly	Arg	Glu	Gly	Glu	Glu	Cys
				50					55					60
His	Pro	Gly	Ser	His	Lys	Val	Pro	Phe	Phe	Arg	Lys	Arg	Lys	His
				65					70					75
His	Thr	Cys	Pro	Cys	Leu	Pro	Asn	Leu	Leu	Cys	Ser	Arg	Phe	Pro
				80					85					90
Asp	Gly	Arg	Tyr	Arg	Cys	Ser	Met	Asp	Leu	Lys	Asn	Ile	Asn	Phe
				95					100					105

<210> 471

<211> 1281

<212> DNA

<213> Homo Sapien

<400> 471

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cattggtgca ggagccctgg gggctgctgc cttggcattg ctgcttgcca 150
acacagacgt gtttctgtcc aagccccaga aagcgccctt ggagtacctg 200
gaggatatag acctgaaaac actggagaag gaaccaagga ctttcaaagc 250
aaaggagcta tgggaaaaaa atggagctgt gattatggcc gtgcggaggc 300
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gaggattatt aagctaaaac ctgggaaata ggaggcttaa aattgactgc 1000
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ttccagcctg ggtgactgag actctaacta a 1281

<210> 472

<211> 229

<212> PRT

<213> Homo Sapien

<400> 472

Met	Ser	Phe	Leu	Gln	Asp	Pro	Ser	Phe	Phe	Thr	Met	Gly	Met	Trp
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Ser	Ile	Gly	Ala	Gly	Ala	Leu	Gly	Ala	Ala	Ala	Leu	Ala	Leu	Leu
				20					25					30
Leu	Ala	Asn	Thr	Asp	Val	Phe	Leu	Ser	Lys	Pro	Gln	Lys	Ala	Ala
				35					40					45
Leu	Glu	Tyr	Leu	Glu	Asp	Ile	Asp	Leu	Lys	Thr	Leu	Glu	Lys	Glu
				50					55					60
Pro	Arg	Thr	Phe	Lys	Ala	Lys	Glu	Leu	Trp	Glu	Lys	Asn	Gly	Ala
				65					70					75
Val	Ile	Met	Ala	Val	Arg	Arg	Pro	Gly	Cys	Phe	Leu	Cys	Arg	Glu
				80					85					90
Glu	Ala	Ala	Asp	Leu	Ser	Ser	Leu	Lys	Ser	Met	Leu	Asp	Gln	Leu
				95					100					105
Gly	Val	Pro	Leu	Tyr	Ala	Val	Val	Lys	Glu	His	Ile	Arg	Thr	Glu
				110					115					120
Val	Lys	Asp	Phe	Gln	Pro	Tyr	Phe	Lys	Gly	Glu	Ile	Phe	Leu	Asp
				125					130					135
Glu	Lys	Lys	Lys	Phe	Tyr	Gly	Pro	Gln	Arg	Arg	Lys	Met	Met	Phe
				140					145					150
Met	Gly	Phe	Ile	Arg	Leu	Gly	Val	Trp	Tyr	Asn	Phe	Phe	Arg	Ala
				155					160					165
Trp	Asn	Gly	Gly	Phe	Ser	Gly	Asn	Leu	Glu	Gly	Glu	Gly	Phe	Ile
				170					175					180
Leu	Gly	Gly	Val	Phe	Val	Val	Gly	Ser	Gly	Lys	Gln	Gly	Ile	Leu
				185					190					195

Leu Glu His Arg Glu Lys Glu Phe Gly Asp Lys Val Asn Leu Leu
 200 205 210

Ser Val Leu Glu Ala Ala Lys Met Ile Lys Pro Gln Thr Leu Ala
 215 220 225

Ser Glu Lys Lys

<210> 473

<211> 713

<212> DNA

<213> Homo Sapien

<400> 473

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 tttctgtcac tattattatt gttggtatgt gaagctattt ggagatccaa 150
 ttcaggaagc aacacattgg agaatggcta ctttctatca agaaataaag 200
 agaaccacag tcaaccaca caatcatctt tagaagacag tgtgactcct 250
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 tgactcaaga gggttaattc ttggtgctga agcctggggc aggggtgtaa 350
 agaaaaacac ttagattcaa tgattgtaaa tttaaggcaa atacacatat 400
 tagtattacc ttagtgtaat gtatccctgt catatataca ataaggtgaa 450
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 taatttttaa aatcagtaac tgatttatca ctggctatgt gcttagatct 550
 acaggagatc atataatttg atacaaataa aagaaaagtg ttctctcccc 600
 ttacagaatt gacattttta atgcgataca gttagaatag gaaatatgac 650
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<210> 474

<211> 90

<212> PRT

<213> Homo Sapien

<400> 474

Met Thr Phe Phe Leu Ser Leu Leu Leu Leu Val Cys Glu Ala
 1 5 10 15
 Ile Trp Arg Ser Asn Ser Gly Ser Asn Thr Leu Glu Asn Gly Tyr
 20 25 30
 Phe Leu Ser Arg Asn Lys Glu Asn His Ser Gln Pro Thr Gln Ser

	35		40		45
Ser Leu Glu Asp	Ser Val Thr Pro Thr	Lys Ala Val Lys Thr Thr			
	50		55		60
Gly Lys Gly Ile Val Lys Gly Arg Asn Leu Asp Ser Arg Gly Leu					
	65		70		75
Ile Leu Gly Ala Glu Ala Trp Gly Arg Gly Val Lys Lys Asn Thr					
	80		85		90

<210> 475
 <211> 1844
 <212> DNA
 <213> Homo Sapien

<400> 475
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 aaggctgaac gcagccaaga ccccttcgag aaatgcatgc aggatcctga 200
 ctatgagcag ctgctcaagg tggtgacctg ggggctcaat cggacctga 250
 agccccagag ggtgattgtg gttggcgctg gtgtggccgg gctggtggcc 300
 gccaaggtgc tcagcgatgc tggacacaag gtcaccatcc tggaggcaga 350
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 ggattgggga gctgggagcc atgcgcatgc ccagctctca caggatcctc 450
 cacaagctct gccagggcct ggggctcaac ctgaccaagt tcaccagta 500
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 gccgtgcagc ttctgggaga cgtgatgtcc gaggatggct tcttctatct 800
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ccggcggtga agcgcatcac cttctcgccg ccgctgcccc gccacatgca 1100
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<211> 567

<212> PRT

<213> Homo Sapien

<400> 476

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Leu	Lys	Val	Val	Thr	Trp	Gly	Leu	Asn	Arg	Thr	Leu	Lys	Pro	Gln
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Arg	Val	Ile	Val	Val	Gly	Ala	Gly	Val	Ala	Gly	Leu	Val	Ala	Ala
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Lys	Val	Leu	Ser	Asp	Ala	Gly	His	Lys	Val	Thr	Ile	Leu	Glu	Ala
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Asp	Asn	Arg	Ile	Gly	Gly	Arg	Ile	Phe	Thr	Tyr	Arg	Asp	Gln	Asn
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Thr	Gly	Trp	Ile	Gly	Glu	Leu	Gly	Ala	Met	Arg	Met	Pro	Ser	Ser		110	115	120
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Glu	Val	Lys	Leu	Arg	Asn	Tyr	Val	Val	Glu	Lys	Val	Pro	Glu	Lys		155	160	165
Leu	Gly	Tyr	Ala	Leu	Arg	Pro	Gln	Glu	Lys	Gly	His	Ser	Pro	Glu		170	175	180
Asp	Ile	Tyr	Gln	Met	Ala	Leu	Asn	Gln	Ala	Leu	Lys	Asp	Leu	Lys		185	190	195
Ala	Leu	Gly	Cys	Arg	Lys	Ala	Met	Lys	Lys	Phe	Glu	Arg	His	Thr		200	205	210
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Val	Gln	Leu	Leu	Gly	Asp	Val	Met	Ser	Glu	Asp	Gly	Phe	Phe	Tyr		230	235	240
Leu	Ser	Phe	Ala	Glu	Ala	Leu	Arg	Ala	His	Ser	Cys	Leu	Ser	Asp		245	250	255
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Arg	Ala	Leu	Leu	Ser	Ser	Leu	Ser	Gly	Leu	Val	Leu	Leu	Asn	Ala		275	280	285
Pro	Val	Val	Ala	Met	Thr	Gln	Gly	Pro	His	Asp	Val	His	Val	Gln		290	295	300
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Thr	Asp	Arg	Pro	Ser	Arg	Met	Ile	Phe	Tyr	Pro	Pro	Pro	Arg	Glu		380	385	390
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<400> 478

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Pro	Gln	Pro	Val	Leu	Pro	Leu	Leu	Asp	Leu	Asn	Asn	Gln	Ser	Val	95	100	105	
Gly	Ile	Glu	Gly	Gly	Ala	Arg	Lys	Gly	Val	Ser	Gln	Lys	Asn	Asn	110	115	120	
Asp	Leu	Thr	Ser	Cys	Cys	Phe	Ser	Asp	Ala	Lys	Thr	Met	Tyr	Glu	125	130	135	
Val	Phe	Gln	Arg	Gly	Leu	Ala	Val	Ser	Asp	Asn	Gly	Pro	Cys	Leu	140	145	150	
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Gln	Val	Ser	Asp	Arg	Ala	Glu	Tyr	Leu	Gly	Ser	Cys	Leu	Leu	His	170	175	180	
Lys	Gly	Tyr	Lys	Ser	Ser	Pro	Asp	Gln	Phe	Val	Gly	Ile	Phe	Ala	185	190	195	
Gln	Asn	Arg	Pro	Glu	Trp	Ile	Ile	Ser	Glu	Leu	Ala	Cys	Tyr	Thr	200	205	210	
Tyr	Ser	Met	Val	Ala	Val	Pro	Leu	Tyr	Asp	Thr	Leu	Gly	Pro	Glu	215	220	225	
Ala	Ile	Val	His	Ile	Val	Asn	Lys	Ala	Asp	Ile	Ala	Met	Val	Ile	230	235	240	
Cys	Asp	Thr	Pro	Gln	Lys	Ala	Leu	Val	Leu	Ile	Gly	Asn	Val	Glu	245	250	255	
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<211> 660

<212> PRT

<213> Homo Sapien

<400> 480

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Asn	Gln	Arg	Ala	Leu	Arg	Arg	Phe	Cys	Gln	Thr	Gly	Ala	Val	Leu
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Phe	Leu	Leu	Val	Thr	Val	Ile	Val	Asn	Ile	Lys	Leu	Ile	Leu	Asp
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Thr	Arg	Arg	Ala	Ile	Ser	Glu	Ala	Asn	Glu	Asp	Pro	Glu	Pro	Glu
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Arg	Gly	Ser	Gly	Pro	Arg	Arg	Val	Leu	Asp	Val	Glu	Val	Tyr	Ser		95	100	105
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Glu	Asp	Glu	Ala	Arg	Glu	Gln	Gly	Arg	Gly	Ile	His	Val	Ile	Val		125	130	135
Leu	Asn	Gln	Ala	Thr	Gly	His	Val	Met	Ala	Lys	Arg	Val	Phe	Asp		140	145	150
Thr	Tyr	Ser	Pro	His	Glu	Asp	Glu	Ala	Met	Val	Leu	Phe	Leu	Asn		155	160	165
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Gly	Ser	Phe	His	Leu	Lys	Asp	Thr	Ala	Lys	Ala	Leu	Leu	Arg	Ser		185	190	195
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Ala	Phe	Val	Gly	Arg	Lys	Gly	Gly	Pro	Val	Phe	Gly	Glu	Lys	His		215	220	225
Ser	Lys	Ser	Pro	Ala	Leu	Ser	Ser	Trp	Gly	Asp	Pro	Val	Leu	Leu		230	235	240
Lys	Thr	Asp	Val	Pro	Leu	Ser	Ser	Ala	Glu	Glu	Ala	Glu	Cys	His		245	250	255
Trp	Ala	Asp	Thr	Glu	Leu	Asn	Arg	Arg	Arg	Arg	Arg	Phe	Cys	Ser		260	265	270
Lys	Val	Glu	Gly	Tyr	Gly	Ser	Val	Cys	Ser	Cys	Lys	Asp	Pro	Thr		275	280	285
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Trp Val Leu Arg	Arg Ser Leu Tyr Lys	Glu Glu Leu Glu Pro Lys			
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Tyr Phe His Glu	Ala Tyr Phe Lys Lys	His Lys Phe Asn Thr Val			
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Tyr Glu Val Glu	Val His Arg Leu Leu	Ser Glu Ala Glu Val Leu			
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Asp Leu Asp Val	Arg Gly Asn His Arg	Gly Leu Trp Arg Leu Phe			
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Arg Lys Lys Asn	His Phe Leu Val Val	Gly Val Pro Ala Ser Pro			
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Tyr Ser Val Lys	Lys Pro Pro Ser Val	Thr Pro Ile Phe Leu Glu			
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<212> DNA
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agtaataatc atctctttttt aaaaaaaaaa aaaaaaaaaa aaaaaa 1346

<210> 482

<211> 212

<212> PRT

<213> Homo Sapien

<400> 482

Met Leu Trp Leu Leu Phe Phe Leu Val Thr Ala Ile His Ala Glu
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Leu Cys Gln Pro Gly Ala Glu Asn Ala Phe Lys Val Arg Leu Ser
20 25 30

Ile Arg Thr Ala Leu Gly Asp Lys Ala Tyr Ala Trp Asp Thr Asn
35 40 45

Glu Glu Tyr Leu Phe Lys Ala Met Val Ala Phe Ser Met Arg Lys
50 55 60

Val Pro Asn Arg Glu Ala Thr Glu Ile Ser His Val Leu Leu Cys
65 70 75

Asn Val Thr Gln Arg Val Ser Phe Trp Phe Val Val Thr Asp Pro
80 85 90

Ser Lys Asn His Thr Leu Pro Ala Val Glu Val Gln Ser Ala Ile
95 100 105

Arg Met Asn Lys Asn Arg Ile Asn Asn Ala Phe Phe Leu Asn Asp
110 115 120

Gln Thr Leu Glu Phe Leu Lys Ile Pro Ser Thr Leu Ala Pro Pro
125 130 135

Met Asp Pro Ser Val Pro Ile Trp Ile Ile Ile Phe Gly Val Ile
140 145 150

Phe Cys Ile Ile Ile Val Ala Ile Ala Leu Leu Ile Leu Ser Gly
155 160 165

Ile Trp Gln Arg Arg Arg Lys Asn Lys Glu Pro Ser Glu Val Asp
170 175 180

Asp Ala Glu Asp Lys Cys Glu Asn Met Ile Thr Ile Glu Asn Gly
185 190 195

Ile Pro Ser Asp Pro Leu Asp Met Lys Gly Gly Ile Leu Met Met
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Pro Ser

<210> 483

<211> 2498

<212> DNA

<213> Homo Sapien

<400> 483

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<210> 484
 <211> 263
 <212> PRT
 <213> Homo Sapien

<400> 484
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 Ala Leu Ala Trp Ala Val Gly Phe Val Ser Ser Met Gly Ser Gly
 20 25 30
 Asn Pro Ala Pro Gly Gly Val Cys Trp Leu Gln Gln Gly Gln Glu
 35 40 45
 Ala Thr Cys Ser Leu Val Leu Gln Thr Asp Val Thr Arg Ala Glu

50										55					60				
Cys	Cys	Ala	Ser	Gly	Asn	Ile	Asp	Thr	Ala	Trp	Ser	Asn	Leu	Thr					
				65					70					75					
His	Pro	Gly	Asn	Lys	Ile	Asn	Leu	Leu	Gly	Phe	Leu	Gly	Leu	Val					
				80					85					90					
His	Cys	Leu	Pro	Cys	Lys	Asp	Ser	Cys	Asp	Gly	Val	Glu	Cys	Gly					
				95					100					105					
Pro	Gly	Lys	Ala	Cys	Arg	Met	Leu	Gly	Gly	Arg	Pro	Arg	Cys	Glu					
				110					115					120					
Cys	Ala	Pro	Asp	Cys	Ser	Gly	Leu	Pro	Ala	Arg	Leu	Gln	Val	Cys					
				125					130					135					
Gly	Ser	Asp	Gly	Ala	Thr	Tyr	Arg	Asp	Glu	Cys	Glu	Leu	Arg	Ala					
				140					145					150					
Ala	Arg	Cys	Arg	Gly	His	Pro	Asp	Leu	Ser	Val	Met	Tyr	Arg	Gly					
				155					160					165					
Arg	Cys	Arg	Lys	Ser	Cys	Glu	His	Val	Val	Cys	Pro	Arg	Pro	Gln					
				170					175					180					
Ser	Cys	Val	Val	Asp	Gln	Thr	Gly	Ser	Ala	His	Cys	Val	Val	Cys					
				185					190					195					
Arg	Ala	Ala	Pro	Cys	Pro	Val	Pro	Ser	Ser	Pro	Gly	Gln	Glu	Leu					
				200					205					210					
Cys	Gly	Asn	Asn	Asn	Val	Thr	Tyr	Ile	Ser	Ser	Cys	His	Met	Arg					
				215					220					225					
Gln	Ala	Thr	Cys	Phe	Leu	Gly	Arg	Ser	Ile	Gly	Val	Arg	His	Ala					
				230					235					240					
Gly	Ser	Cys	Ala	Gly	Thr	Pro	Glu	Glu	Pro	Pro	Gly	Gly	Glu	Ser					
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<210> 485
 <211> 1429
 <212> DNA
 <213> Homo Sapien

<400> 485
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 ctgattttga gatgatgggc ttgggaaacg ggcgtcgag catgaagtcg 150
 ccgccccctcg tgctggccgc cctggtggcc tgcacatcg tcttgggctt 200

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 aaggaggtga aggaacagtg tgaggagcga atagaagagg tcaccaaaaa 650
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 ggaatcatac actctgaatt gaactggaat cacatatttc acaacagggc 1350
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 gaaatgtact aaataaaatg tacatctga 1429

<210> 486

<211> 401

<212> PRT

<213> Homo Sapien

<400> 486

Met Met Gly Leu Gly Asn Gly Arg Arg Ser Met Lys Ser Pro Pro
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Leu	Val	Leu	Ala	Ala	Leu	Val	Ala	Cys	Ile	Ile	Val	Leu	Gly	Phe	20	25	30
Asn	Tyr	Trp	Ile	Ala	Ser	Ser	Arg	Ser	Val	Asp	Leu	Gln	Thr	Arg	35	40	45
Ile	Met	Glu	Leu	Glu	Gly	Arg	Val	Arg	Arg	Ala	Ala	Ala	Glu	Arg	50	55	60
Gly	Ala	Val	Glu	Leu	Lys	Lys	Asn	Glu	Phe	Gln	Gly	Glu	Leu	Glu	65	70	75
Lys	Gln	Arg	Glu	Gln	Leu	Asp	Lys	Ile	Gln	Ser	Ser	His	Asn	Phe	80	85	90
Gln	Leu	Glu	Ser	Val	Asn	Lys	Leu	Tyr	Gln	Asp	Glu	Lys	Ala	Val	95	100	105
Leu	Val	Asn	Asn	Ile	Thr	Thr	Gly	Glu	Arg	Leu	Ile	Arg	Val	Leu	110	115	120
Gln	Asp	Gln	Leu	Lys	Thr	Leu	Gln	Arg	Asn	Tyr	Gly	Arg	Leu	Gln	125	130	135
Gln	Asp	Val	Leu	Gln	Phe	Gln	Lys	Asn	Gln	Thr	Asn	Leu	Glu	Arg	140	145	150
Lys	Phe	Ser	Tyr	Asp	Leu	Ser	Gln	Cys	Ile	Asn	Gln	Met	Lys	Glu	155	160	165
Val	Lys	Glu	Gln	Cys	Glu	Glu	Arg	Ile	Glu	Glu	Val	Thr	Lys	Lys	170	175	180
Gly	Asn	Glu	Ala	Val	Ala	Ser	Arg	Asp	Leu	Ser	Glu	Asn	Asn	Asp	185	190	195
Gln	Arg	Gln	Gln	Leu	Gln	Ala	Leu	Ser	Glu	Pro	Gln	Pro	Arg	Leu	200	205	210
Gln	Ala	Ala	Gly	Leu	Pro	His	Thr	Glu	Val	Pro	Gln	Gly	Lys	Gly	215	220	225
Asn	Val	Leu	Gly	Asn	Ser	Lys	Ser	Gln	Thr	Pro	Ala	Pro	Ser	Ser	230	235	240
Glu	Val	Val	Leu	Asp	Ser	Lys	Arg	Gln	Val	Glu	Lys	Glu	Glu	Thr	245	250	255
Asn	Glu	Ile	Gln	Val	Val	Asn	Glu	Glu	Pro	Gln	Arg	Asp	Arg	Leu	260	265	270
Pro	Gln	Glu	Pro	Gly	Arg	Glu	Gln	Val	Val	Glu	Asp	Arg	Pro	Val	275	280	285
Gly	Gly	Arg	Gly	Phe	Gly	Gly	Ala	Gly	Glu	Leu	Gly	Gln	Thr	Pro	290	295	300
Gln	Val	Gln	Ala	Ala	Leu	Ser	Val	Ser	Gln	Glu	Asn	Pro	Glu	Met			

305	310	315
Glu Gly Pro Glu Arg Asp Gln Leu Val	Ile Pro Asp Gly Gln Glu	
320	325	330
Glu Glu Gln Glu Ala Ala Gly Glu Gly	Arg Asn Gln Gln Lys Leu	
335	340	345
Arg Gly Glu Asp Asp Tyr Asn Met Asp	Glu Asn Glu Ala Glu Ser	
350	355	360
Glu Thr Asp Lys Gln Ala Ala Leu Ala	Gly Asn Asp Arg Asn Ile	
365	370	375
Asp Val Phe Asn Val Glu Asp Gln Lys	Arg Asp Thr Ile Asn Leu	
380	385	390
Leu Asp Gln Arg Glu Lys Arg Asn His	Thr Leu	
395	400	

<210> 487
 <211> 1371
 <212> DNA
 <213> Homo Sapien

<400> 487
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<210> 488

<211> 215

<212> PRT

<213> Homo Sapien

<400> 488

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Ile	Gln	Leu	Thr	Ala	Leu	Trp	Pro	Ile	Ala	Ala	Val	Glu	Ile	Tyr
				20					25					30
Thr	Ser	Arg	Val	Leu	Glu	Ala	Val	Asn	Gly	Thr	Asp	Ala	Arg	Leu
				35					40					45
Lys	Cys	Thr	Phe	Ser	Ser	Phe	Ala	Pro	Val	Gly	Asp	Ala	Leu	Thr
				50					55					60
Val	Thr	Trp	Asn	Phe	Arg	Pro	Leu	Asp	Gly	Gly	Pro	Glu	Gln	Phe
				65					70					75
Val	Phe	Tyr	Tyr	His	Ile	Asp	Pro	Phe	Gln	Pro	Met	Ser	Gly	Arg
				80					85					90
Phe	Lys	Asp	Arg	Val	Ser	Trp	Asp	Gly	Asn	Pro	Glu	Arg	Tyr	Asp
				95					100					105
Ala	Ser	Ile	Leu	Leu	Trp	Lys	Leu	Gln	Phe	Asp	Asp	Asn	Gly	Thr
				110					115					120
Tyr	Thr	Cys	Gln	Val	Lys	Asn	Pro	Pro	Asp	Val	Asp	Gly	Val	Ile
				125					130					135
Gly	Glu	Ile	Arg	Leu	Ser	Val	Val	His	Thr	Val	Arg	Phe	Ser	Glu

140	145	150
Ile His Phe Leu Ala Leu Ala Ile Gly Ser Ala Cys Ala Leu Met		
155	160	165
Ile Ile Ile Val Ile Val Val Val Leu Phe Gln His Tyr Arg Lys		
170	175	180
Lys Arg Trp Ala Glu Arg Ala His Lys Val Val Glu Ile Lys Ser		
185	190	195
Lys Glu Glu Glu Arg Leu Asn Gln Glu Lys Lys Val Ser Val Tyr		
200	205	210
Leu Glu Asp Thr Asp		
215		

<210> 489
 <211> 2476
 <212> DNA
 <213> Homo Sapien

<400> 489
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 cttggcgctg gcggtactgg ccccgaggc aggggagcag aggcggagag 200
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taaaatagtt gtatgtgagc atttgatggg gaaaaaaaaa aaaaaaaaaa 2400
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 aaaaaaaaaa aaaaaaaaaa aaaaaa 2476

<210> 490
 <211> 536
 <212> PRT
 <213> Homo Sapien

<400> 490
 Met Leu Leu Leu Trp Val Ser Val Val Ala Ala Leu Ala Leu Ala
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 Val Leu Ala Pro Gly Ala Gly Glu Gln Arg Arg Arg Ala Ala Lys
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 Ala Pro Asn Val Val Leu Val Val Ser Asp Ser Phe Asp Gly Arg
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 Leu Thr Phe His Pro Gly Ser Gln Val Val Lys Leu Pro Phe Ile
 50 55 60
 Asn Phe Met Lys Thr Arg Gly Thr Ser Phe Leu Asn Ala Tyr Thr
 65 70 75
 Asn Ser Pro Ile Cys Cys Pro Ser Arg Ala Ala Met Trp Ser Gly
 80 85 90
 Leu Phe Thr His Leu Thr Glu Ser Trp Asn Asn Phe Lys Gly Leu
 95 100 105
 Asp Pro Asn Tyr Thr Thr Trp Met Asp Val Met Glu Arg His Gly
 110 115 120
 Tyr Arg Thr Gln Lys Phe Gly Lys Leu Asp Tyr Thr Ser Gly His
 125 130 135
 His Ser Ile Ser Asn Arg Val Glu Ala Trp Thr Arg Asp Val Ala
 140 145 150
 Phe Leu Leu Arg Gln Glu Gly Arg Pro Met Val Asn Leu Ile Arg
 155 160 165
 Asn Arg Thr Lys Val Arg Val Met Glu Arg Asp Trp Gln Asn Thr
 170 175 180
 Asp Lys Ala Val Asn Trp Leu Arg Lys Glu Ala Ile Asn Tyr Thr
 185 190 195
 Glu Pro Phe Val Ile Tyr Leu Gly Leu Asn Leu Pro His Pro Tyr
 200 205 210
 Pro Ser Pro Ser Ser Gly Glu Asn Phe Gly Ser Ser Thr Phe His
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 Thr Ser Leu Tyr Trp Leu Glu Lys Val Ser His Asp Ala Ile Lys

Trp Leu Lys Thr His Met Asn Pro Arg Ala Val
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<210> 491
<211> 1475
<212> DNA
<213> Homo Sapien

<400> 491
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<210> 492

<211> 230

<212> PRT

<213> Homo Sapien

<400> 492

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Lys	Thr	Ser	Ser	Tyr	Val	Gly	Ala	Ser	Ile	Val	Thr	Ala	Val	Gly	35	40	45	
Phe	Ser	Lys	Gly	Leu	Trp	Met	Glu	Cys	Ala	Thr	His	Ser	Thr	Gly	50	55	60	
Ile	Thr	Gln	Cys	Asp	Ile	Tyr	Ser	Thr	Leu	Leu	Gly	Leu	Pro	Ala	65	70	75	
Asp	Ile	Gln	Ala	Ala	Gln	Ala	Met	Met	Val	Thr	Ser	Ser	Ala	Ile	80	85	90	
Ser	Ser	Leu	Ala	Cys	Ile	Ile	Ser	Val	Val	Gly	Met	Arg	Cys	Thr	95	100	105	
Val	Phe	Cys	Gln	Glu	Ser	Arg	Ala	Lys	Asp	Arg	Val	Ala	Val	Ala	110	115	120	
Gly	Gly	Val	Phe	Phe	Ile	Leu	Gly	Gly	Leu	Leu	Gly	Phe	Ile	Pro	125	130	135	
Val	Ala	Trp	Asn	Leu	His	Gly	Ile	Leu	Arg	Asp	Phe	Tyr	Ser	Pro	140	145	150	
Leu	Val	Pro	Asp	Ser	Met	Lys	Phe	Glu	Ile	Gly	Glu	Ala	Leu	Tyr	155	160	165	
Leu	Gly	Ile	Ile	Ser	Ser	Leu	Phe	Ser	Leu	Ile	Ala	Gly	Ile	Ile	170	175	180	
Leu	Cys	Phe	Ser	Cys	Ser	Ser	Gln	Arg	Asn	Arg	Ser	Asn	Tyr	Tyr	185	190	195	
Asp	Ala	Tyr	Gln	Ala	Gln	Pro	Leu	Ala	Thr	Arg	Ser	Ser	Pro	Arg	200	205	210	

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Leu Thr Gly Tyr Val
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<210> 493
 <211> 610
 <212> DNA
 <213> Homo Sapien

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<210> 494
 <211> 119
 <212> PRT
 <213> Homo Sapien

<400> 494
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 20 25 30
 Pro Trp Leu Cys Gln Pro Ala Pro Arg Cys Gly Asp Lys Ile Tyr
 35 40 45
 Asn Pro Leu Glu Gln Cys Cys Tyr Asn Asp Ala Ile Val Ser Leu
 50 55 60
 Ser Glu Thr Arg Gln Cys Gly Pro Pro Cys Thr Phe Trp Pro Cys
 65 70 75

Phe	Glu	Leu	Cys	Cys	Leu	Asp	Ser	Phe	Gly	Leu	Thr	Asn	Asp	Phe
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Val	Val	Lys	Leu	Lys	Val	Gln	Gly	Val	Asn	Ser	Gln	Cys	His	Ser
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Ser	Pro	Ile	Ser	Ser	Lys	Cys	Glu	Ser	Arg	Arg	Arg	Phe	Pro	
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<210> 495
 <211> 771
 <212> DNA
 <213> Homo Sapien

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<210> 496
 <211> 110
 <212> PRT
 <213> Homo Sapien

<400> 496
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 1 5 10 15
 Ile Ser Arg Leu Leu Cys Ser His Gly Ala Pro Val Ala Pro Met
 20 25 30

Thr	Pro	Tyr	Leu	Met	Leu	Cys	Gln	Pro	His	Lys	Arg	Cys	Gly	Asp	
				35					40					45	
Lys	Phe	Tyr	Asp	Pro	Leu	Gln	His	Cys	Cys	Tyr	Asp	Asp	Ala	Val	
				50					55					60	
Val	Pro	Leu	Ala	Arg	Thr	Gln	Thr	Cys	Gly	Asn	Cys	Thr	Phe	Arg	
				65					70					75	
Val	Cys	Phe	Glu	Gln	Cys	Cys	Pro	Trp	Thr	Phe	Met	Val	Lys	Leu	
				80					85					90	
Ile	Asn	Gln	Asn	Cys	Asp	Ser	Ala	Arg	Thr	Ser	Asp	Asp	Arg	Leu	
				95					100					105	
Cys	Arg	Ser	Val	Ser											
				110											

<210> 497

<211> 2089

<212> DNA

<213> Homo Sapien

<400> 497

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<211> 444

<212> PRT

<213> Homo Sapien

<400> 498

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10

15

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Thr	Pro	Ala	Pro	Gln	Asn	Gln	Thr	Ser	Arg	Val	Val	Gln	Ala	Pro		35	40	45
Arg	Glu	Glu	Glu	Glu	Asp	Glu	Gln	Glu	Ala	Ser	Glu	Glu	Lys	Ala		50	55	60
Gly	Glu	Glu	Glu	Lys	Ala	Trp	Leu	Met	Ala	Ser	Arg	Gln	Gln	Leu		65	70	75
Ala	Lys	Glu	Thr	Ser	Asn	Phe	Gly	Phe	Ser	Leu	Leu	Arg	Lys	Ile		80	85	90
Ser	Met	Arg	His	Asp	Gly	Asn	Met	Val	Phe	Ser	Pro	Phe	Gly	Met		95	100	105
Ser	Leu	Ala	Met	Thr	Gly	Leu	Met	Leu	Gly	Ala	Thr	Gly	Pro	Thr		110	115	120
Glu	Thr	Gln	Ile	Lys	Arg	Gly	Leu	His	Leu	Gln	Ala	Leu	Lys	Pro		125	130	135
Thr	Lys	Pro	Gly	Leu	Leu	Pro	Ser	Leu	Phe	Lys	Gly	Leu	Arg	Glu		140	145	150
Thr	Leu	Ser	Arg	Asn	Leu	Glu	Leu	Gly	Leu	Ser	Gln	Gly	Ser	Phe		155	160	165
Ala	Phe	Ile	His	Lys	Asp	Phe	Asp	Val	Lys	Glu	Thr	Phe	Phe	Asn		170	175	180
Leu	Ser	Lys	Arg	Tyr	Phe	Asp	Thr	Glu	Cys	Val	Pro	Met	Asn	Phe		185	190	195
Arg	Asn	Ala	Ser	Gln	Ala	Lys	Arg	Leu	Met	Asn	His	Tyr	Ile	Asn		200	205	210
Lys	Glu	Thr	Arg	Gly	Lys	Ile	Pro	Lys	Leu	Phe	Asp	Glu	Ile	Asn		215	220	225
Pro	Glu	Thr	Lys	Leu	Ile	Leu	Val	Asp	Tyr	Ile	Leu	Phe	Lys	Gly		230	235	240
Lys	Trp	Leu	Thr	Pro	Phe	Asp	Pro	Val	Phe	Thr	Glu	Val	Asp	Thr		245	250	255
Phe	His	Leu	Asp	Lys	Tyr	Lys	Thr	Ile	Lys	Val	Pro	Met	Met	Tyr		260	265	270
Gly	Ala	Gly	Lys	Phe	Ala	Ser	Thr	Phe	Asp	Lys	Asn	Phe	Arg	Cys		275	280	285
His	Val	Leu	Lys	Leu	Pro	Tyr	Gln	Gly	Asn	Ala	Thr	Met	Leu	Val		290	295	300
Val	Leu	Met	Glu	Lys	Met	Gly	Asp	His	Leu	Ala	Leu	Glu	Asp	Tyr				

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<210> 500

<211> 93

<212> PRT

<213> Homo Sapien

<400> 500

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Ala Gly Ala Gly Val Gly Tyr Ala Leu Leu Val Ile Val Thr Pro
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Gly Glu Arg Arg Lys Gln Glu Met Leu Lys Glu Met Pro Leu Gln
35 40 45

Asp Pro Arg Ser Arg Glu Glu Ala Ala Arg Thr Gln Gln Leu Leu
50 55 60

Leu Ala Thr Leu Gln Glu Ala Ala Thr Thr Gln Glu Asn Val Ala
65 70 75

Trp Arg Lys Asn Trp Met Val Gly Gly Glu Gly Gly Ala Ser Gly
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Arg Ser Pro

<210> 501

<211> 1883

<212> DNA

<213> Homo Sapien

<400> 501

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<210> 502
<211> 406
<212> PRT
<213> Homo Sapien

<400> 502

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Glu	Arg	Arg	Leu	Ala	Ala	Leu	Glu	Glu	Arg	Leu	Ala	Gln	Cys	Gln	35	40	45	
Asp	Gln	Ser	Ser	Arg	His	Ala	Ala	Glu	Leu	Arg	Asp	Phe	Lys	Asn	50	55	60	
Lys	Met	Leu	Pro	Leu	Leu	Glu	Val	Ala	Glu	Lys	Glu	Arg	Glu	Ala	65	70	75	
Leu	Arg	Thr	Glu	Ala	Asp	Thr	Ile	Ser	Gly	Arg	Val	Asp	Arg	Leu	80	85	90	
Glu	Arg	Glu	Val	Asp	Tyr	Leu	Glu	Thr	Gln	Asn	Pro	Ala	Leu	Pro	95	100	105	
Cys	Val	Glu	Phe	Asp	Glu	Lys	Val	Thr	Gly	Gly	Pro	Gly	Thr	Lys	110	115	120	
Gly	Lys	Gly	Arg	Arg	Asn	Glu	Lys	Tyr	Asp	Met	Val	Thr	Asp	Cys	125	130	135	
Gly	Tyr	Thr	Ile	Ser	Gln	Val	Arg	Ser	Met	Lys	Ile	Leu	Lys	Arg	140	145	150	
Phe	Gly	Gly	Pro	Ala	Gly	Leu	Trp	Thr	Lys	Asp	Pro	Leu	Gly	Gln	155	160	165	
Thr	Glu	Lys	Ile	Tyr	Val	Leu	Asp	Gly	Thr	Gln	Asn	Asp	Thr	Ala	170	175	180	
Phe	Val	Phe	Pro	Arg	Leu	Arg	Asp	Phe	Thr	Leu	Ala	Met	Ala	Ala	185	190	195	
Arg	Lys	Ala	Ser	Arg	Val	Arg	Val	Pro	Phe	Pro	Trp	Val	Gly	Thr	200	205	210	
Gly	Gln	Leu	Val	Tyr	Gly	Gly	Phe	Leu	Tyr	Phe	Ala	Arg	Arg	Pro	215	220	225	
Pro	Gly	Arg	Pro	Gly	Gly	Gly	Gly	Glu	Met	Glu	Asn	Thr	Leu	Gln	230	235	240	
Leu	Ile	Lys	Phe	His	Leu	Ala	Asn	Arg	Thr	Val	Val	Asp	Ser	Ser	245	250	255	
Val	Phe	Pro	Ala	Glu	Gly	Leu	Ile	Pro	Pro	Tyr	Gly	Leu	Thr	Ala	260	265	270	
Asp	Thr	Tyr	Ile	Asp	Leu	Val	Ala	Asp	Glu	Glu	Gly	Leu	Trp	Ala	275	280	285	

Val	Tyr	Ala	Thr	Arg	Glu	Asp	Asp	Arg	His	Leu	Cys	Leu	Ala	Lys
				290					295					300
Leu	Asp	Pro	Gln	Thr	Leu	Asp	Thr	Glu	Gln	Gln	Trp	Asp	Thr	Pro
			305						310					315
Cys	Pro	Arg	Glu	Asn	Ala	Glu	Ala	Ala	Phe	Val	Ile	Cys	Gly	Thr
			320						325					330
Leu	Tyr	Val	Val	Tyr	Asn	Thr	Arg	Pro	Ala	Ser	Arg	Ala	Arg	Ile
			335						340					345
Gln	Cys	Ser	Phe	Asp	Ala	Ser	Gly	Thr	Leu	Thr	Pro	Glu	Arg	Ala
			350						355					360
Ala	Leu	Pro	Tyr	Phe	Pro	Arg	Arg	Tyr	Gly	Ala	His	Ala	Ser	Leu
			365						370					375
Arg	Tyr	Asn	Pro	Arg	Glu	Arg	Gln	Leu	Tyr	Ala	Trp	Asp	Asp	Gly
			380						385					390
Tyr	Gln	Ile	Val	Tyr	Lys	Leu	Glu	Met	Arg	Lys	Lys	Glu	Glu	Glu
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Val

<210> 503
 <211> 689
 <212> DNA
 <213> Homo Sapien

<400> 503
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 ctggaccctg agcagcttct tgggccctgg tacgtgcttg cggtggcctc 150
 ccgggaaaag ggctttgccca tggagaagga catgaagaac gtcgtggggg 200
 tgggtggtgac cctcactcca gaaaacaacc tgcggacgct gtcctctcag 250
 cacgggctgg gaggggtgtga ccagagtgtc atggacctga taaagcgaaa 300
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 tgetggccac caacttcaga gactatgccca tcatcttcac tcagctggag 400
 ttcggggacg agcccttcaa caccgtggag ctgtacagtc tgacggagac 450
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 gcttctctgtc acagtagcag gccagctgc agaaggacct cacctgtgct 550
 cacaagatcc ttctgtgagt gctgcgtccc cagtagggat ggcgcccaca 600
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gggccagca ccagctcaga ataaagcgat tccacagca 689

<210> 504

<211> 163

<212> PRT

<213> Homo Sapien

<400> 504

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Pro Arg Ala Gln Ala Val Trp Leu Gly Arg Leu Asp Pro Glu Gln
20 25 30

Leu Leu Gly Pro Trp Tyr Val Leu Ala Val Ala Ser Arg Glu Lys
35 40 45

Gly Phe Ala Met Glu Lys Asp Met Lys Asn Val Val Gly Val Val
50 55 60

Val Thr Leu Thr Pro Glu Asn Asn Leu Arg Thr Leu Ser Ser Gln
65 70 75

His Gly Leu Gly Gly Cys Asp Gln Ser Val Met Asp Leu Ile Lys
80 85 90

Arg Asn Ser Gly Trp Val Phe Glu Asn Pro Ser Ile Gly Val Leu
95 100 105

Glu Leu Trp Val Leu Ala Thr Asn Phe Arg Asp Tyr Ala Ile Ile
110 115 120

Phe Thr Gln Leu Glu Phe Gly Asp Glu Pro Phe Asn Thr Val Glu
125 130 135

Leu Tyr Ser Leu Thr Glu Thr Ala Ser Gln Glu Ala Met Gly Leu
140 145 150

Phe Thr Lys Trp Ser Arg Ser Leu Gly Phe Leu Ser Gln
155 160

<210> 505

<211> 1204

<212> DNA

<213> Homo Sapien

<400> 505

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aggccatgag gattctgcag ttaatcctgc ttgctctggc aacagggctt 150

gtagggggag agaccaggat catcaagggg ttcgagtga agcctcactc 200

ccagccctgg caggcagccc tgttcgagaa gacgcggcta ctctgtgggg 250

cgacgctcat cgccccaga tggctcctga cagcagccca ctgcctcaag 300

ccccgctaca tagttcacct ggggcagcac aacctccaga aggaggagg 350
ctgtgagcag acccgacag cactgagtc cttccccac cccggcttca 400
acaacagcct cccaacaaa gaccaccgca atgacatcat gctggtgaag 450
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ctcacgctgt gtcactgctg gcaccagctg cctcatttcc ggctggggca 550
gcaagtcag ccccgagttc cgcctgcctc acaccttgcg atgcgccaac 600
atcaccatca ttgagcacca gaagtgtgag aacgcctacc ccggcaacat 650
cacagacacc atggtgtgtg ccagcgtgca ggaagggggc aaggactcct 700
gccaggggtga ctccgggggc cctctgggtct gtaaccagtc tcttcaaggc 750
attatctcct ggggccagga tccgtgtgag atcaccgaa agcctggtgt 800
ctacacgaaa gtctgcaa atgtggactg gatccaggag acgatgaaga 850
acaattagac tggaccacc caccacagcc catcaccctc catttccact 900
tggtgtttgg ttcctgttca ctctgtta atagaaccct aagccaagac 950
cctctacgaa cattctttgg gcctcctgga ctacaggaga tgctgtcact 1000
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aaatatttgc taaatgaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 1200
aaaa 1204

<210> 506
<211> 250
<212> PRT
<213> Homo Sapien

<400> 506
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20 25 30
His Ser Gln Pro Trp Gln Ala Ala Leu Phe Glu Lys Thr Arg Leu
35 40 45
Leu Cys Gly Ala Thr Leu Ile Ala Pro Arg Trp Leu Leu Thr Ala
50 55 60
Ala His Cys Leu Lys Pro Arg Tyr Ile Val His Leu Gly Gln His
65 70 75

Asn	Leu	Gln	Lys	Glu	Glu	Gly	Cys	Glu	Gln	Thr	Arg	Thr	Ala	Thr	
				80					85					90	
Glu	Ser	Phe	Pro	His	Pro	Gly	Phe	Asn	Asn	Ser	Leu	Pro	Asn	Lys	
				95					100					105	
Asp	His	Arg	Asn	Asp	Ile	Met	Leu	Val	Lys	Met	Ala	Ser	Pro	Val	
				110					115					120	
Ser	Ile	Thr	Trp	Ala	Val	Arg	Pro	Leu	Thr	Leu	Ser	Ser	Arg	Cys	
				125					130					135	
Val	Thr	Ala	Gly	Thr	Ser	Cys	Leu	Ile	Ser	Gly	Trp	Gly	Ser	Thr	
				140					145					150	
Ser	Ser	Pro	Gln	Leu	Arg	Leu	Pro	His	Thr	Leu	Arg	Cys	Ala	Asn	
				155					160					165	
Ile	Thr	Ile	Ile	Glu	His	Gln	Lys	Cys	Glu	Asn	Ala	Tyr	Pro	Gly	
				170					175					180	
Asn	Ile	Thr	Asp	Thr	Met	Val	Cys	Ala	Ser	Val	Gln	Glu	Gly	Gly	
				185					190					195	
Lys	Asp	Ser	Cys	Gln	Gly	Asp	Ser	Gly	Gly	Pro	Leu	Val	Cys	Asn	
				200					205					210	
Gln	Ser	Leu	Gln	Gly	Ile	Ile	Ser	Trp	Gly	Gln	Asp	Pro	Cys	Ala	
				215					220					225	
Ile	Thr	Arg	Lys	Pro	Gly	Val	Tyr	Thr	Lys	Val	Cys	Lys	Tyr	Val	
				230					235					240	
Asp	Trp	Ile	Gln	Glu	Thr	Met	Lys	Asn	Asn						
				245					250						

<210> 507
 <211> 636
 <212> DNA
 <213> Homo Sapien

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 tgtgggaggc aggtgcagtc ccagcaccca aggtccctat caagatgcaa 150
 gtcaaactact ggccctcaga gcaggaccca gagaaggcct ggggcgcccg 200
 tgtggtggag cctccggaga aggacgacca gctggtggtg ctgttccctg 250
 tccagaagcc gaaactcttg accaccgagg agaagccacg aggtcagggc 300
 aggggccccca tccttccagg caccaaggcc tggatggaga ccgaggacac 350
 cctggggccgt gtccctgagtc ccgagcccga ccatgacagc ctgtaccacc 400

ctccgcctga ggaggaccag ggcgaggaga ggccccggtt gtgggtgatg 450
 ccaaatcacc aggtgctcct gggaccggag gaagaccaag accacatcta 500
 ccacccccag tagggctcca ggggccatca ctgccccgc cctgtcccaa 550
 ggcccaggct gttgggactg ggaccctccc taccctgccc cagctagaca 600
 aataaacccc agcaggcaaa aaaaaaaaaa aaaaaa 636

<210> 508
 <211> 151
 <212> PRT
 <213> Homo Sapien

<400> 508
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 20 25 30
 Gln Val Lys His Trp Pro Ser Glu Gln Asp Pro Glu Lys Ala Trp
 35 40 45
 Gly Ala Arg Val Val Glu Pro Pro Glu Lys Asp Asp Gln Leu Val
 50 55 60
 Val Leu Phe Pro Val Gln Lys Pro Lys Leu Leu Thr Thr Glu Glu
 65 70 75
 Lys Pro Arg Gly Gln Gly Arg Gly Pro Ile Leu Pro Gly Thr Lys
 80 85 90
 Ala Trp Met Glu Thr Glu Asp Thr Leu Gly Arg Val Leu Ser Pro
 95 100 105
 Glu Pro Asp His Asp Ser Leu Tyr His Pro Pro Pro Glu Glu Asp
 110 115 120
 Gln Gly Glu Glu Arg Pro Arg Leu Trp Val Met Pro Asn His Gln
 125 130 135
 Val Leu Leu Gly Pro Glu Glu Asp Gln Asp His Ile Tyr His Pro
 140 145 150
 Gln

<210> 509
 <211> 1281
 <212> DNA
 <213> Homo Sapien

<400> 509
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 ctagcgctgc tggggggccgc ccatgaaagc gcagccatgg cggcatctgc 200
 aaacatagag aattctgggc ttccacacaa ctccagtgt aactcaacag 250
 agactctcca acatgtgcct tctgaccata caaatgaaac ttccaacagt 300
 actgtgaaac caccaacttc agttgcctca gactccagta atacaacggt 350
 caccaccatg aaacctacag cggcatctaa tacaacaaca ccagggatgg 400
 tctcaacaaa tatgacttct accaccttaa agtctacacc caaaacaaca 450
 agtggtttcac agaacacatc tcagatatca acatccacaa tgaccgtaac 500
 ccacaatagt tcagtgcacat ctgctgcttc atcagtaaca atcacaacaa 550
 ctatgcattc tgaagcaaag aaaggatcaa aatttgatac tgggagcttt 600
 gttggtggta ttgtattaac gctgggagtt ttatctattc ttacattgg 650
 atgcaaaatg tattactcaa gaagagggcat tcggtatcga accatagatg 700
 aacatgatgc catcatttaa ggaaatccat ggaccaagga tggaatacag 750
 attgatgctg ccctatcaat taattttggt ttattaatag tttaaaacaa 800
 tattctcttt ttgaaaatag tataaacagg ccatgcatat aatgtacagt 850
 gtattacgta aatatgtaaa gattcttcaa ggtaacaagg gtttgggttt 900
 tgaaataaac atctggatct tatagaccgt tcatacaatg gttttagcaa 950
 gttcatagta agacaaacaa gtctatctt ttttttttgg ctgggggtggg 1000
 ggcattggtc acatatgacc agtaattgaa agacgtcatc actgaaagac 1050
 agaatgccat ctgggcatac aaataagaag tttgtcacag cactcaggat 1100
 tttgggtatc tttttagct cacataaaga acttcagtgc ttttcagagc 1150
 tggatatatc ttaattacta atgccacaca gaaattatac aatcaaacta 1200
 gatctgaagc ataatttaag aaaaacatca acattttttg tgctttaaac 1250
 tgtagtagtt ggtctagaaa caaaatactc c 1281

<210> 510

<211> 208

<212> PRT

<213> Homo Sapien

<400> 510

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[illegible]

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ctcagcaagc cagcatggct aggatgagct ttgttatagc agcttgccaa 150
ttgggtgctgg gcctactaat gacttcatta accgagtctt ccatacagaa 200
tagtgagtgt ccacaacttt gcgtatgtga aattcgtccc tggtttacct 250
cacagtcaac ttacagagaa gccaccactg ttgattgcaa tgacctccgc 300
ttaacaaggga ttoccaqtaa cctctctagt gacacacaaq tqcttctctt 350
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Figure 6. The same as Figure 5, but for the case of $\beta = 0$. The curves are labeled by the values of α .

				80					85					90
Leu	Gln	Gln	Leu	Phe 95	Asn	Leu	Thr	Glu	Leu 100	Asp	Phe	Ser	Gln	Asn 105
Asn	Phe	Thr	Asn	Ile 110	Lys	Glu	Val	Gly	Leu 115	Ala	Asn	Leu	Thr	Gln 120
Leu	Thr	Thr	Leu	His 125	Leu	Glu	Glu	Asn	Gln 130	Ile	Thr	Glu	Met	Thr 135
Asp	Tyr	Cys	Leu	Gln 140	Asp	Leu	Ser	Asn	Leu 145	Gln	Glu	Leu	Tyr	Ile 150
Asn	His	Asn	Gln	Ile 155	Ser	Thr	Ile	Ser	Ala 160	His	Ala	Phe	Ala	Gly 165
Leu	Lys	Asn	Leu	Leu 170	Arg	Leu	His	Leu	Asn 175	Ser	Asn	Lys	Leu	Lys 180
Val	Ile	Asp	Ser	Arg 185	Trp	Phe	Asp	Ser	Thr 190	Pro	Asn	Leu	Glu	Ile 195
Leu	Met	Ile	Gly	Glu 200	Asn	Pro	Val	Ile	Gly 205	Ile	Leu	Asp	Met	Asn 210
Phe	Lys	Pro	Leu	Ala 215	Asn	Leu	Arg	Ser	Leu 220	Val	Leu	Ala	Gly	Met 225
Tyr	Leu	Thr	Asp	Ile 230	Pro	Gly	Asn	Ala	Leu 235	Val	Gly	Leu	Asp	Ser 240
Leu	Glu	Ser	Leu	Ser 245	Phe	Tyr	Asp	Asn	Lys 250	Leu	Val	Lys	Val	Pro 255
Gln	Leu	Ala	Leu	Gln 260	Lys	Val	Pro	Asn	Leu 265	Lys	Phe	Leu	Asp	Leu 270
Asn	Lys	Asn	Pro	Ile 275	His	Lys	Ile	Gln	Glu 280	Gly	Asp	Phe	Lys	Asn 285
Met	Leu	Arg	Leu	Lys 290	Glu	Leu	Gly	Ile	Asn 295	Asn	Met	Gly	Glu	Leu 300
Val	Ser	Val	Asp	Arg 305	Tyr	Ala	Leu	Asp	Asn 310	Leu	Pro	Glu	Leu	Thr 315
Lys	Leu	Glu	Ala	Thr 320	Asn	Asn	Pro	Lys	Leu 325	Ser	Tyr	Ile	His	Arg 330
Leu	Ala	Phe	Arg	Ser 335	Val	Pro	Ala	Leu	Glu 340	Ser	Leu	Met	Leu	Asn 345
Asn	Asn	Ala	Leu	Asn 350	Ala	Ile	Tyr	Gln	Lys 355	Thr	Val	Glu	Ser	Leu 360
Pro	Asn	Leu	Arg	Glu 365	Ile	Ser	Ile	His	Ser 370	Asn	Pro	Leu	Arg	Cys 375

Asp	Cys	Val	Ile	His	Trp	Ile	Asn	Ser	Asn	Lys	Thr	Asn	Ile	Arg
				380					385					390
Phe	Met	Glu	Pro	Leu	Ser	Met	Phe	Cys	Ala	Met	Pro	Pro	Glu	Tyr
				395					400					405
Lys	Gly	His	Gln	Val	Lys	Glu	Val	Leu	Ile	Gln	Asp	Ser	Ser	Glu
				410					415					420
Gln	Cys	Leu	Pro	Met	Ile	Ser	His	Asp	Ser	Phe	Pro	Asn	Arg	Leu
				425					430					435
Asn	Val	Asp	Ile	Gly	Thr	Thr	Val	Phe	Leu	Asp	Cys	Arg	Ala	Met
				440					445					450
Ala	Glu	Pro	Glu	Pro	Glu	Ile	Tyr	Trp	Val	Thr	Pro	Ile	Gly	Asn
				455					460					465
Lys	Ile	Thr	Val	Glu	Thr	Leu	Ser	Asp	Lys	Tyr	Lys	Leu	Ser	Ser
				470					475					480
Glu	Gly	Thr	Leu	Glu	Ile	Ser	Asn	Ile	Gln	Ile	Glu	Asp	Ser	Gly
				485					490					495
Arg	Tyr	Thr	Cys	Val	Ala	Gln	Asn	Val	Gln	Gly	Ala	Asp	Thr	Arg
				500					505					510
Val	Ala	Thr	Ile	Lys	Val	Asn	Gly	Thr	Leu	Leu	Asp	Gly	Thr	Gln
				515					520					525
Val	Leu	Lys	Ile	Tyr	Val	Lys	Gln	Thr	Glu	Ser	His	Ser	Ile	Leu
				530					535					540
Val	Ser	Trp	Lys	Val	Asn	Ser	Asn	Val	Met	Thr	Ser	Asn	Leu	Lys
				545					550					555
Trp	Ser	Ser	Ala	Thr	Met	Lys	Ile	Asp	Asn	Pro	His	Ile	Thr	Tyr
				560					565					570
Thr	Ala	Arg	Val	Pro	Val	Asp	Val	His	Glu	Tyr	Asn	Leu	Thr	His
				575					580					585
Leu	Gln	Pro	Ser	Thr	Asp	Tyr	Glu	Val	Cys	Leu	Thr	Val	Ser	Asn
				590					595					600
Ile	His	Gln	Gln	Thr	Gln	Lys	Ser	Cys	Val	Asn	Val	Thr	Thr	Lys
				605					610					615
Asn	Ala	Ala	Phe	Ala	Val	Asp	Ile	Ser	Asp	Gln	Glu	Thr	Ser	Thr
				620					625					630
Ala	Leu	Ala	Ala	Val	Met	Gly	Ser	Met	Phe	Ala	Val	Ile	Ser	Leu
				635					640					645
Ala	Ser	Ile	Ala	Val	Tyr	Phe	Ala	Lys	Arg	Phe	Lys	Arg	Lys	Asn
				650					655					660
Tyr	His	His	Ser	Leu	Lys	Lys	Tyr	Met	Gln	Lys	Thr	Ser	Ser	Ile

	665		670		675									
Pro	Leu	Asn	Glu	Leu	Tyr	Pro	Pro	Leu	Ile	Asn	Leu	Trp	Glu	Gly
			680						685					690
Asp	Ser	Glu	Lys	Asp	Lys	Asp	Gly	Ser	Ala	Asp	Thr	Lys	Pro	Thr
			695						700					705
Gln	Val	Asp	Thr	Ser	Arg	Ser	Tyr	Tyr	Met	Trp				
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<210> 513

<211> 957

<212> DNA

<213> Homo Sapien

<400> 513

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ccccattgag aaggtcattg aagggatcaa ccgagggctg agcaatgcag 200
agagagaggt gggcaaggcc ctggatggca tcaacagtgg aatcacgcat 250
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<211> 247
 <212> PRT
 <213> Homo Sapien

<400> 514

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Leu	Gly	Ala	Leu	Ser	Gly	Trp	Ala	Ala	Ser	Asp	Asp	Pro	Ile	Glu	20	25	30	
Lys	Val	Ile	Glu	Gly	Ile	Asn	Arg	Gly	Leu	Ser	Asn	Ala	Glu	Arg	35	40	45	
Glu	Val	Gly	Lys	Ala	Leu	Asp	Gly	Ile	Asn	Ser	Gly	Ile	Thr	His	50	55	60	
Ala	Gly	Arg	Glu	Val	Glu	Lys	Val	Phe	Asn	Gly	Leu	Ser	Asn	Met	65	70	75	
Gly	Ser	His	Thr	Gly	Lys	Glu	Leu	Asp	Lys	Gly	Val	Gln	Gly	Leu	80	85	90	
Asn	His	Gly	Met	Asp	Lys	Val	Ala	His	Glu	Ile	Asn	His	Gly	Ile	95	100	105	
Gly	Gln	Ala	Gly	Lys	Glu	Ala	Glu	Lys	Leu	Gly	His	Gly	Val	Asn	110	115	120	
Asn	Ala	Ala	Gly	Gln	Ala	Gly	Lys	Glu	Ala	Asp	Lys	Ala	Val	Gln	125	130	135	
Gly	Phe	His	Thr	Gly	Val	His	Gln	Ala	Gly	Lys	Glu	Ala	Glu	Lys	140	145	150	
Leu	Gly	Gln	Gly	Val	Asn	His	Ala	Ala	Asp	Gln	Ala	Gly	Lys	Glu	155	160	165	
Val	Glu	Lys	Leu	Gly	Gln	Gly	Ala	His	His	Ala	Ala	Gly	Gln	Ala	170	175	180	
Gly	Lys	Glu	Leu	Gln	Asn	Ala	His	Asn	Gly	Val	Asn	Gln	Ala	Ser	185	190	195	
Lys	Glu	Ala	Asn	Gln	Leu	Leu	Asn	Gly	Asn	His	Gln	Ser	Gly	Ser	200	205	210	
Ser	Ser	His	Gln	Gly	Gly	Ala	Thr	Thr	Thr	Pro	Leu	Ala	Ser	Gly	215	220	225	
Ala	Ser	Val	Asn	Thr	Pro	Phe	Ile	Asn	Leu	Pro	Ala	Leu	Trp	Arg	230	235	240	
Ser	Val	Ala	Asn	Ile	Met	Pro	245											

<210> 515
 <211> 1942

<212> DNA
<213> Homo Sapien

<400> 515

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ggccgcgact accggcagct gacagcgca tgagcgactc cccagagacg 300
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cggcgcgccc ccgggctgtg aatgcgactc gcccctcggc cgcgctcccc 550
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ggcagttggc gcgctctcca gttccctcct ggtcacctgc tgctgatgg 650
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gagcagccgg gccaggagaa gcgtgagcac gccactcggg acgccccggg 750
gcgggtgaac gagctcgggc gcccggcgag ggacgagggc ggacgcggcc 800
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ccaccgagg agtacgtgta cccggactac cgtggcaagg gctgcgtgga 1050
cgagagcggc ttcgtgtacg cgatcgggga gaagtgcgc cggggcccct 1100
cggcctgccc gtgcctgtgc accgaggagg ggccgctgtg cgcgcagccc 1150
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ctgcccgcag tgcaaggaga ggaagaacta ctgcgagttc cggggcaaga 1250
cctatcagac tttggaggag ttcgtggtgt ctccatgcga gaggtgtcgc 1300
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ggagtgtgtg gaccctgtgt acgagcctga tcagtgtgtg cccatctgca 1400
 aaaatggtcc aaactgcttt gcagaaaccg cggtgatccc tgctggcaga 1450
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 cacatggaga atcgagcggc aggccatgtg cactgagacat gaatgcaggc 1550
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 tactgatgtg aacattctag atgactctgg gaactatcag tcaaagaaga 1650
 cttttgatga ggaataatgg aaaattgttg gtacttttcc ttttcttgat 1700
 aacagttact acaacagaag gaaatggata tatttcaaaa catcaacaag 1750
 aactttgggc ataaaatcct tctctaaata aatgtgctat tttcacagta 1800
 agtacacaaa agtacactat tatatatcaa atgtatttct ataatccctc 1850
 cattagagag cttatataag tgttttctat agatgcagat taaaaatgct 1900
 gtgttgtcaa ccgtcaaaaa aaaaaaaaaa aaaaaaaaaa aa 1942

<210> 516
 <211> 325
 <212> PRT
 <213> Homo Sapien

<400> 516
 Met Pro Ser Ser Thr Ala Met Ala Val Gly Ala Leu Ser Ser Ser
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 Leu Leu Val Thr Cys Cys Leu Met Val Ala Leu Cys Ser Pro Ser
 20 25 30
 Ile Pro Leu Glu Lys Leu Ala Gln Ala Pro Glu Gln Pro Gly Gln
 35 40 45
 Glu Lys Arg Glu His Ala Thr Arg Asp Gly Pro Gly Arg Val Asn
 50 55 60
 Glu Leu Gly Arg Pro Ala Arg Asp Glu Gly Gly Ser Gly Arg Asp
 65 70 75
 Trp Lys Ser Lys Ser Gly Arg Gly Leu Ala Gly Arg Glu Pro Trp
 80 85 90
 Ser Lys Leu Lys Gln Ala Trp Val Ser Gln Gly Gly Gly Ala Lys
 95 100 105
 Ala Gly Asp Leu Gln Val Arg Pro Arg Gly Asp Thr Pro Gln Ala
 110 115 120
 Glu Ala Leu Ala Ala Ala Ala Gln Asp Ala Ile Gly Pro Glu Leu
 125 130 135
 Ala Pro Thr Pro Glu Pro Pro Glu Glu Tyr Val Tyr Pro Asp Tyr

	140		145		150
Arg Gly Lys Gly Cys Val Asp Glu Ser Gly Phe Val Tyr Ala Ile					
	155		160		165
Gly Glu Lys Phe Ala Pro Gly Pro Ser Ala Cys Pro Cys Leu Cys					
	170		175		180
Thr Glu Glu Gly Pro Leu Cys Ala Gln Pro Glu Cys Pro Arg Leu					
	185		190		195
His Pro Arg Cys Ile His Val Asp Thr Ser Gln Cys Cys Pro Gln					
	200		205		210
Cys Lys Glu Arg Lys Asn Tyr Cys Glu Phe Arg Gly Lys Thr Tyr					
	215		220		225
Gln Thr Leu Glu Glu Phe Val Val Ser Pro Cys Glu Arg Cys Arg					
	230		235		240
Cys Glu Ala Asn Gly Glu Val Leu Cys Thr Val Ser Ala Cys Pro					
	245		250		255
Gln Thr Glu Cys Val Asp Pro Val Tyr Glu Pro Asp Gln Cys Cys					
	260		265		270
Pro Ile Cys Lys Asn Gly Pro Asn Cys Phe Ala Glu Thr Ala Val					
	275		280		285
Ile Pro Ala Gly Arg Glu Val Lys Thr Asp Glu Cys Thr Ile Cys					
	290		295		300
His Cys Thr Tyr Glu Glu Gly Thr Trp Arg Ile Glu Arg Gln Ala					
	305		310		315
Met Cys Thr Arg His Glu Cys Arg Gln Met					
	320		325		

<210> 517
 <211> 1419
 <212> DNA
 <213> Homo Sapien

<400> 517
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 gttccggtcg catggcagag tgctacggac gacgcctatg aagcccttag 150
 tccttctagt tgcgcttttg ctatggcctt cgtctgtgcc ggcttatccg 200
 agcataactg tgacacctga tgaagagcaa aacttgaatc attatatata 250
 agtttttagag aacctagtac gaagtgttcc ctctggggag ccagggtcgtg 300
 agaaaaaatc taactctcca aaacatgttt attctatagc atcaaaggga 350

tcaaaattta aggagctagt tacacatgga gacgcttcaa ctgagaatga 400
 tgttttaacc aatcctatca gtgaagaaac tacaactttc cctacaggag 450
 gcttcacacc ggaaatagga aagaaaaaac acacggaaag taccatttc 500
 tggctgatca aaccaaaciaa tgtttccatt gttttgcatg cagaggaacc 550
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 aaactgaggg accaagaatg ttgccagttg ttactgaatc atctacaagt 650
 ccatatgtta cctcatacaa gtcacctgtc accactttag ataagagcac 700
 tggcattgag atctctacag aatcagaaga tgttcctcag ctctcagggtg 750
 aaactgcatg agaaaaaccc gaagagtttg gaaagcacc agagagttgg 800
 aataatgatg acattttgaa aaaaatttta gatattaatt cacaagtga 850
 acaggcactt cttagtgaac ccagcaaccc agcatataga gaagatattg 900
 aagcctctaa agatcaccta aaacgaagcc ttgctctagc agcagcagca 950
 gaacataaat taaaaacaat gtataagtcc cagttattgc cagtaggacg 1000
 aacaagtaat aaaattgatg acatcgaaac tggtattaac atgctgtgta 1050
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 aaaaatttta aacctacttg atattccata acaaagctga tttaagcaaa 1250
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 ataaaaatat tttctattgt agttcaaagtg tgccaacatc tttatgtgtc 1350
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 attttggttc aggaaaaaa 1419

<210> 518

<211> 350

<212> PRT

<213> Homo Sapien

<400> 518

Met	Lys	Pro	Leu	Val	Leu	Leu	Val	Ala	Leu	Leu	Leu	Trp	Pro	Ser
1				5					10					15
Ser	Val	Pro	Ala	Tyr	Pro	Ser	Ile	Thr	Val	Thr	Pro	Asp	Glu	Glu
				20					25					30
Gln	Asn	Leu	Asn	His	Tyr	Ile	Gln	Val	Leu	Glu	Asn	Leu	Val	Arg
				35					40					45

Ser	Val	Pro	Ser	Gly	Glu	Pro	Gly	Arg	Glu	Lys	Lys	Ser	Asn	Ser		50	55	60
Pro	Lys	His	Val	Tyr	Ser	Ile	Ala	Ser	Lys	Gly	Ser	Lys	Phe	Lys		65	70	75
Glu	Leu	Val	Thr	His	Gly	Asp	Ala	Ser	Thr	Glu	Asn	Asp	Val	Leu		80	85	90
Thr	Asn	Pro	Ile	Ser	Glu	Glu	Thr	Thr	Thr	Phe	Pro	Thr	Gly	Gly		95	100	105
Phe	Thr	Pro	Glu	Ile	Gly	Lys	Lys	Lys	His	Thr	Glu	Ser	Thr	Pro		110	115	120
Phe	Trp	Ser	Ile	Lys	Pro	Asn	Asn	Val	Ser	Ile	Val	Leu	His	Ala		125	130	135
Glu	Glu	Pro	Tyr	Ile	Glu	Asn	Glu	Glu	Pro	Glu	Pro	Glu	Pro	Glu		140	145	150
Pro	Ala	Ala	Lys	Gln	Thr	Glu	Ala	Pro	Arg	Met	Leu	Pro	Val	Val		155	160	165
Thr	Glu	Ser	Ser	Thr	Ser	Pro	Tyr	Val	Thr	Ser	Tyr	Lys	Ser	Pro		170	175	180
Val	Thr	Thr	Leu	Asp	Lys	Ser	Thr	Gly	Ile	Glu	Ile	Ser	Thr	Glu		185	190	195
Ser	Glu	Asp	Val	Pro	Gln	Leu	Ser	Gly	Glu	Thr	Ala	Ile	Glu	Lys		200	205	210
Pro	Glu	Glu	Phe	Gly	Lys	His	Pro	Glu	Ser	Trp	Asn	Asn	Asp	Asp		215	220	225
Ile	Leu	Lys	Lys	Ile	Leu	Asp	Ile	Asn	Ser	Gln	Val	Gln	Gln	Ala		230	235	240
Leu	Leu	Ser	Asp	Thr	Ser	Asn	Pro	Ala	Tyr	Arg	Glu	Asp	Ile	Glu		245	250	255
Ala	Ser	Lys	Asp	His	Leu	Lys	Arg	Ser	Leu	Ala	Leu	Ala	Ala	Ala		260	265	270
Ala	Glu	His	Lys	Leu	Lys	Thr	Met	Tyr	Lys	Ser	Gln	Leu	Leu	Pro		275	280	285
Val	Gly	Arg	Thr	Ser	Asn	Lys	Ile	Asp	Asp	Ile	Glu	Thr	Val	Ile		290	295	300
Asn	Met	Leu	Cys	Asn	Ser	Arg	Ser	Lys	Leu	Tyr	Glu	Tyr	Leu	Asp		305	310	315
Ile	Lys	Cys	Val	Pro	Pro	Glu	Met	Arg	Glu	Lys	Ala	Ala	Thr	Val		320	325	330
Phe	Asn	Thr	Leu	Lys	Asn	Met	Cys	Arg	Ser	Arg	Arg	Val	Thr	Ala				

Leu Leu Lys Val Tyr
350

<210> 519

<211> 1630

<212> DNA

<213> Homo Sapien

<400> 519

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gctcttcacg ttggatttga aagttgagag cagcatgttt tgcccactga 100
aactcatcct gctgccagtg ttactggatt attccttggg cctgaatgac 150
ttgaatgttt ccccgctga gctaacagtc catgtgggtg attcagctct 200
gatgggatgt gttttccaga gcacagaaga caaatgtata ttcaagatag 250
actggactct gtcaccagga gagcacgcca aggacgaata tgtgctatac 300
tattactcca atctcagtgt gcctattggg cgcttcaga accgcgtaca 350
cttgatgggg gacatcttat gcaatgatgg ctctctcctg ctccaagatg 400
tgcaagaggc tgaccaggga acctatatct gtgaaatccg cctcaaaggg 450
gagagccagg tgttcaagaa ggcgggtggt ctgcatgtgc ttccagagga 500
gccc aaagag ctcatggtcc atgtgggtgg attgattcag atgggatgtg 550
ttttccagag cacagaagtg aaacacgtga ccaaggtaga atggatattt 600
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tgaacctggt gggggacatt ttccgcaatg acggttccat catgcttcaa 750
ggagtgaggg agtcagatgg aggaaactac acctgcagta tccacctagg 800
gaacctggtg ttcaagaaaa ccattgtgct gcatgtcagc ccggaagagc 850
ctcgaacact ggtgaccccg gcagccctga ggcctctggt cttgggtggt 900
aatcagttgg tgatcattgt gggaattgtc tgtgccacaa tctgctgct 950
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ctccccaata attgtacggg aggtgatcga ggaagaagaa ccaagtgaaa 1150
aatcagaggc cacctacatg accatgcacc cagtttggcc ttctctgagg 1200

tcagatcgga acaactcact tgaaaaaaag tcaggtgggg gaatgccaaa 1250
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gaacaggcct gctgagggga ggggagcatg gacttggcct ctggagtggg 1500
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gaatcagaga taaaaaccaa cccaaatcaa 1630

<210> 520

<211> 394

<212> PRT

<213> Homo Sapien

<400> 520

Met	Phe	Cys	Pro	Leu	Lys	Leu	Ile	Leu	Leu	Pro	Val	Leu	Leu	Asp	1	5	10	15
Tyr	Ser	Leu	Gly	Leu	Asn	Asp	Leu	Asn	Val	Ser	Pro	Pro	Glu	Leu	20	25	30	
Thr	Val	His	Val	Gly	Asp	Ser	Ala	Leu	Met	Gly	Cys	Val	Phe	Gln	35	40	45	
Ser	Thr	Glu	Asp	Lys	Cys	Ile	Phe	Lys	Ile	Asp	Trp	Thr	Leu	Ser	50	55	60	
Pro	Gly	Glu	His	Ala	Lys	Asp	Glu	Tyr	Val	Leu	Tyr	Tyr	Tyr	Ser	65	70	75	
Asn	Leu	Ser	Val	Pro	Ile	Gly	Arg	Phe	Gln	Asn	Arg	Val	His	Leu	80	85	90	
Met	Gly	Asp	Ile	Leu	Cys	Asn	Asp	Gly	Ser	Leu	Leu	Leu	Gln	Asp	95	100	105	
Val	Gln	Glu	Ala	Asp	Gln	Gly	Thr	Tyr	Ile	Cys	Glu	Ile	Arg	Leu	110	115	120	
Lys	Gly	Glu	Ser	Gln	Val	Phe	Lys	Lys	Ala	Val	Val	Leu	His	Val	125	130	135	
Leu	Pro	Glu	Glu	Pro	Lys	Glu	Leu	Met	Val	His	Val	Gly	Gly	Leu	140	145	150	
Ile	Gln	Met	Gly	Cys	Val	Phe	Gln	Ser	Thr	Glu	Val	Lys	His	Val	155	160	165	
Thr	Lys	Val	Glu	Trp	Ile	Phe	Ser	Gly	Arg	Arg	Ala	Lys	Glu	Glu				

Lys	Gly	Thr	Phe	Lys	Gly	His	Lys	Cys	Ser	Pro	Cys	Asp	Thr	Asn
				95					100					105
Trp	Arg	Tyr	Tyr	Gly	Asp	Ser	Cys	Tyr	Gly	Phe	Phe	Arg	His	Asn
				110					115					120
Leu	Thr	Trp	Glu	Glu	Ser	Lys	Gln	Tyr	Cys	Thr	Asp	Met	Asn	Ala
				125					130					135
Thr	Leu	Leu	Lys	Ile	Asp	Asn	Arg	Asn	Ile	Val	Glu	Tyr	Ile	Lys
				140					145					150
Ala	Arg	Thr	His	Leu	Ile	Arg	Trp	Val	Gly	Leu	Ser	Arg	Gln	Lys
				155					160					165
Ser	Asn	Glu	Val	Trp	Lys	Trp	Glu	Asp	Gly	Ser	Val	Ile	Ser	Glu
				170					175					180
Asn	Met	Phe	Glu	Phe	Leu	Glu	Asp	Gly	Lys	Gly	Asn	Met	Asn	Cys
				185					190					195
Ala	Tyr	Phe	His	Asn	Gly	Lys	Met	His	Pro	Thr	Phe	Cys	Glu	Asn
				200					205					210
Lys	His	Tyr	Leu	Met	Cys	Glu	Arg	Lys	Ala	Gly	Met	Thr	Lys	Val
				215					220					225
Asp Gln Leu Pro														

<210> 523
 <211> 1197
 <212> DNA
 <213> Homo Sapien

<400> 523
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 ttgtggactg gtgtttggta tcctggccct aactctaatt gtcctgtttt 200
 gggggagcaa gcacttctgg ccggaggtac ccaaaaaagc ctatgacatg 250
 gagcacactt tctacagcaa tggagagaag aagaagattt acatggaaat 300
 tgatcctgtg accagaactg aaatattcag aagcggaaat ggcactgatg 350
 aaacattgga agtgcacgac tttaaaaacg gatacactgg catctacttc 400
 gtgggtcttc aaaaatgttt tatcaaaact cagattaaag tgattcctga 450
 attttctgaa ccagaagagg aaatagatga gaatgaagaa attaccacaa 500
 ctttctttga acagtcagtg atttgggtcc cagcagaaaa gcctattgaa 550

aaccgagatt ttcttaaaaa ttccaaaatt ctggagattt gtgataacgt 600
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gggattgaac aaaatgaaca gtgggtggtc cctcaagtga aagtagagaa 750
gacccgtcac gccagacaag caagtgagga agaacttcca ataatgact 800
atactgaaaa tggaatagaa tttgatccca tgctggatga gagaggttat 850
tggtgtat ttt actgccgtcg aggcaaccgc tattgccgcc gcgtctgtga 900
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<210> 524
<211> 317
<212> PRT
<213> Homo Sapien

<400> 524
Met Ala Lys Asn Pro Pro Glu Asn Cys Glu Asp Cys His Ile Leu
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Asn Ala Glu Ala Phe Lys Ser Lys Lys Ile Cys Lys Ser Leu Lys
20 25 30
Ile Cys Gly Leu Val Phe Gly Ile Leu Ala Leu Thr Leu Ile Val
35 40 45
Leu Phe Trp Gly Ser Lys His Phe Trp Pro Glu Val Pro Lys Lys
50 55 60
Ala Tyr Asp Met Glu His Thr Phe Tyr Ser Asn Gly Glu Lys Lys
65 70 75
Lys Ile Tyr Met Glu Ile Asp Pro Val Thr Arg Thr Glu Ile Phe
80 85 90
Arg Ser Gly Asn Gly Thr Asp Glu Thr Leu Glu Val His Asp Phe
95 100 105
Lys Asn Gly Tyr Thr Gly Ile Tyr Phe Val Gly Leu Gln Lys Cys
110 115 120
Phe Ile Lys Thr Gln Ile Lys Val Ile Pro Glu Phe Ser Glu Pro
125 130 135

tcatcatccc aggctctgac tgagtttctt tcagttttac tgatgttctg 400
 ggtggggggac agagccagat tcagagtaat cttgactgaa tggagaaagt 450
 ttctgtgcta ccctacaaa cccatgcctc actgacagac cagcattttt 500
 tttttaacac gtcaataaaa aaataatctc ccaga 535

<210> 526
 <211> 85
 <212> PRT
 <213> Homo Sapien

<400> 526
 Met Lys Ile Thr Gly Gly Leu Leu Leu Leu Cys Thr Val Val Tyr
 1 5 10 15
 Phe Cys Ser Ser Ser Glu Ala Ala Ser Leu Ser Pro Lys Lys Val
 20 25 30
 Asp Cys Ser Ile Tyr Lys Lys Tyr Pro Val Val Ala Ile Pro Cys
 35 40 45
 Pro Ile Thr Tyr Leu Pro Val Cys Gly Ser Asp Tyr Ile Thr Tyr
 50 55 60
 Gly Asn Glu Cys His Leu Cys Thr Glu Ser Leu Lys Ser Asn Gly
 65 70 75
 Arg Val Gln Phe Leu His Asp Gly Ser Cys
 80 85

<210> 527
 <211> 2387
 <212> DNA
 <213> Homo Sapien

<400> 527
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 gccgcggccc tggctgcggc gctgctctcg tcgcttgccg gctgctctct 100
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 aataaatatt tttggtatatt atttatgaaa tatttgaaca ttttttcaat 2100
 aattcctttt tacttctagg aagtctcaaa agaccatctt aaattattat 2150
 atgtttggac aattagcaac aagtcagata gttagaatcg aagtttttca 2200
 aatccattgc ttagctaact ttttcattct gtcacttggc ttcgattttt 2250
 atattttcct attatatgaa atgtatcttt tggttggttg atttttcttt 2300
 ctttctttgt aaatagttct gagttctgtc aaatgccgtg aaagtatttg 2350
 ctataataaa gaaaattctt gtgactttaa aaaaaaa 2387

<210> 528

<211> 487

<212> PRT

<213> Homo Sapien

<400> 528

Met	Leu	Arg	Ala	Pro	Gly	Cys	Leu	Leu	Arg	Thr	Ser	Val	Ala	Pro	1	5	10	15
Ala	Ala	Ala	Leu	Ala	Ala	Ala	Leu	Leu	Ser	Ser	Leu	Ala	Arg	Cys	20	25	30	
Ser	Leu	Leu	Glu	Pro	Arg	Asp	Pro	Val	Ala	Ser	Ser	Leu	Ser	Pro	35	40	45	
Tyr	Phe	Gly	Thr	Lys	Thr	Arg	Tyr	Glu	Asp	Val	Asn	Pro	Val	Leu	50	55	60	
Leu	Ser	Gly	Pro	Glu	Ala	Pro	Trp	Arg	Asp	Pro	Glu	Leu	Leu	Glu	65	70	75	
Gly	Thr	Cys	Thr	Pro	Val	Gln	Leu	Val	Ala	Leu	Ile	Arg	His	Gly	80	85	90	
Thr	Arg	Tyr	Pro	Thr	Val	Lys	Gln	Ile	Arg	Lys	Leu	Arg	Gln	Leu	95	100	105	
His	Gly	Leu	Leu	Gln	Ala	Arg	Gly	Ser	Arg	Asp	Gly	Gly	Ala	Ser	110	115	120	
Ser	Thr	Gly	Ser	Arg	Asp	Leu	Gly	Ala	Ala	Leu	Ala	Asp	Trp	Pro	125	130	135	
Leu	Trp	Tyr	Ala	Asp	Trp	Met	Asp	Gly	Gln	Leu	Val	Glu	Lys	Gly	140	145	150	
Arg	Gln	Asp	Met	Arg	Gln	Leu	Ala	Leu	Arg	Leu	Ala	Ser	Leu	Phe	155	160	165	
Pro	Ala	Leu	Phe	Ser	Arg	Glu	Asn	Tyr	Gly	Arg	Leu	Arg	Leu	Ile				

Thr Ser Ser Lys His Arg Cys Met Asp	Ser Ser Ala Ala Phe Leu	
185	190	195
Gln Gly Leu Trp Gln His Tyr His Pro	Gly Leu Pro Pro Pro Asp	
200	205	210
Val Ala Asp Met Glu Phe Gly Pro Pro	Thr Val Asn Asp Lys Leu	
215	220	225
Met Arg Phe Phe Asp His Cys Glu Lys	Phe Leu Thr Glu Val Glu	
230	235	240
Lys Asn Ala Thr Ala Leu Tyr His Val	Glu Ala Phe Lys Thr Gly	
245	250	255
Pro Glu Met Gln Asn Ile Leu Lys Lys	Val Ala Ala Thr Leu Gln	
260	265	270
Val Pro Val Asn Asp Leu Asn Ala Asp	Leu Ile Gln Val Ala Phe	
275	280	285
Phe Thr Cys Ser Phe Asp Leu Ala Ile	Lys Gly Val Lys Ser Pro	
290	295	300
Trp Cys Asp Val Phe Asp Ile Asp Asp	Ala Lys Val Leu Glu Tyr	
305	310	315
Leu Asn Asp Leu Lys Gln Tyr Trp Lys	Arg Gly Tyr Gly Tyr Thr	
320	325	330
Ile Asn Ser Arg Ser Ser Cys Thr Leu	Phe Gln Asp Ile Phe Gln	
335	340	345
His Leu Asp Lys Ala Val Glu Gln Lys	Gln Arg Ser Gln Pro Ile	
350	355	360
Ser Ser Pro Val Ile Leu Gln Phe Gly	His Ala Glu Thr Leu Leu	
365	370	375
Pro Leu Leu Ser Leu Met Gly Tyr Phe	Lys Asp Lys Glu Pro Leu	
380	385	390
Thr Ala Tyr Asn Tyr Lys Lys Gln Met	His Arg Lys Phe Arg Ser	
395	400	405
Gly Leu Ile Val Pro Tyr Ala Ser Asn	Leu Ile Phe Val Leu Tyr	
410	415	420
His Cys Glu Asn Ala Lys Thr Pro Lys	Glu Gln Phe Arg Val Gln	
425	430	435
Met Leu Leu Asn Glu Lys Val Leu Pro	Leu Ala Tyr Ser Gln Glu	
440	445	450
Thr Val Ser Phe Tyr Glu Asp Leu Lys	Asn His Tyr Lys Asp Ile	
455	460	465

Leu Gln Ser Cys Gln Thr Ser Glu Glu Cys Glu Leu Ala Arg Ala
470 475 480

Asn Ser Thr Ser Asp Glu Leu
485

<210> 529
<211> 1777
<212> DNA
<213> Homo Sapien

<400> 529
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ccggcgcgagg tggcggagag atcagaagcc tcttcccca ggcgagccaa 100
cctcagcggg gacccgggct cagggacgcg gcggcggcgg cggcgactgc 150
agtggctgga cgatggcagc gtccgccgga gccggggcgg tgattgcagc 200
cccagacagc cggcgctggc tgtggtcgtt gctggcggcg gcgcttgggc 250
tcttgacagc tggagtatca gccttgaag tatatacgcc aaaagaaatc 300
ttcgtggcaa atggtacaca aggaagctg acctgcaagt tcaagtctac 350
tagtacgact ggcgggttga cctcagtctc ctggagcttc cagccagagg 400
gggccgacac tactgtgtcg tttttccact actcccaagg gcaagtgtac 450
cttgggaatt atccaccatt taaagacaga atcagctggg ctggagacct 500
tgacaagaaa gatgcatcaa tcaacataga aaatatgcag tttatacaca 550
atggcaccta tatctgtgat gtcaaaaacc ctctgacat cgttgtccag 600
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ctctgtcat cagcatgatt ctggctgtcc tctatagaag gaaaaactct 750
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gcaggctcct cggaagtccc cctccgacac tgagggtctt gtaaagagtc 850
tgccttctgg atctcaccag ggcccagtc tataatgcaca gttagaccac 900
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gaaacaaaac caaactggac tctogtgcag aaaatgtagc ccattaccac 1050
atgtagcctt ggagaccag gcaaggacaa gtacacgtgt actcacagag 1100
ggagagaaaag atgtgtacaa aggatatgta taaatattct atttagtcat 1150

cctgatatga ggagccagtg ttgcatgatg aaaagatggg atgattctac 1200
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caattgggag atttcagaaa cattcctttc accatcattt agaaatgggt 1300
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tttgcaccct tgaaatgtgt catatcaatt tctggattca taatagcaag 1650
attagcaaag gataaatgcc gaagggtcact tcattctgga cacagttgga 1700
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cgtggagagt aaaaagtatc ggtttta 1777

<210> 530

<211> 269

<212> PRT

<213> Homo Sapien

<400> 530

Met	Ala	Ala	Ser	Ala	Gly	Ala	Gly	Ala	Val	Ile	Ala	Ala	Pro	Asp
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Ser	Arg	Arg	Trp	Leu	Trp	Ser	Val	Leu	Ala	Ala	Ala	Leu	Gly	Leu
				20					25					30
Leu	Thr	Ala	Gly	Val	Ser	Ala	Leu	Glu	Val	Tyr	Thr	Pro	Lys	Glu
				35					40					45
Ile	Phe	Val	Ala	Asn	Gly	Thr	Gln	Gly	Lys	Leu	Thr	Cys	Lys	Phe
				50					55					60
Lys	Ser	Thr	Ser	Thr	Thr	Gly	Gly	Leu	Thr	Ser	Val	Ser	Trp	Ser
				65					70					75
Phe	Gln	Pro	Glu	Gly	Ala	Asp	Thr	Thr	Val	Ser	Phe	Phe	His	Tyr
				80					85					90
Ser	Gln	Gly	Gln	Val	Tyr	Leu	Gly	Asn	Tyr	Pro	Pro	Phe	Lys	Asp
				95					100					105
Arg	Ile	Ser	Trp	Ala	Gly	Asp	Leu	Asp	Lys	Lys	Asp	Ala	Ser	Ile
				110					115					120
Asn	Ile	Glu	Asn	Met	Gln	Phe	Ile	His	Asn	Gly	Thr	Tyr	Ile	Cys
				125					130					135

Asp	Val	Lys	Asn	Pro	Pro	Asp	Ile	Val	Val	Gln	Pro	Gly	His	Ile
				140					145					150
Arg	Leu	Tyr	Val	Val	Glu	Lys	Glu	Asn	Leu	Pro	Val	Phe	Pro	Val
				155					160					165
Trp	Val	Val	Val	Gly	Ile	Val	Thr	Ala	Val	Val	Leu	Gly	Leu	Thr
				170					175					180
Leu	Leu	Ile	Ser	Met	Ile	Leu	Ala	Val	Leu	Tyr	Arg	Arg	Lys	Asn
				185					190					195
Ser	Lys	Arg	Asp	Tyr	Thr	Gly	Cys	Ser	Thr	Ser	Glu	Ser	Leu	Ser
				200					205					210
Pro	Val	Lys	Gln	Ala	Pro	Arg	Lys	Ser	Pro	Ser	Asp	Thr	Glu	Gly
				215					220					225
Leu	Val	Lys	Ser	Leu	Pro	Ser	Gly	Ser	His	Gln	Gly	Pro	Val	Ile
				230					235					240
Tyr	Ala	Gln	Leu	Asp	His	Ser	Gly	Gly	His	His	Ser	Asp	Lys	Ile
				245					250					255
Asn	Lys	Ser	Glu	Ser	Val	Val	Tyr	Ala	Asp	Ile	Arg	Lys	Asn	
				260					265					

<210> 531
 <211> 1150
 <212> DNA
 <213> Homo Sapien

<400> 531
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 ctggggcaac ccggctgctc ctgctcttgc tgatggcggg agcagcgccc 150
 agtcgagccc ggggcagcgg ctgccgggcc gggactgggtg cgcgaggggc 200
 tggggcgga ggtcgagagg gcgaggcctg tggcacgggtg gggctgctgc 250
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 gctcagcgag gaggagcggg gccgactccg ggatgtggca gccctgaatg 400
 gcctgtaccg ggtccggatc ccaaggcgac ccggggccct ggatggcctg 450
 gaagctgggtg gctatgtctc ctctttgtc cctgcgtgct ccctgggtgga 500
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 tacaagcttg attgaaattc actgctcact tgatacgta ttcagaaacc 1050
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<210> 532

<211> 269

<212> PRT

<213> Homo Sapien

<400> 532

Met	Ala	Ala	Ala	Ser	Ala	Gly	Ala	Thr	Arg	Leu	Leu	Leu	Leu	Leu	Leu	1	5	10	15
Leu	Met	Ala	Val	Ala	Ala	Pro	Ser	Arg	Ala	Arg	Gly	Ser	Gly	Cys		20	25	30	
Arg	Ala	Gly	Thr	Gly	Ala	Arg	Gly	Ala	Gly	Ala	Glu	Gly	Arg	Glu		35	40	45	
Gly	Glu	Ala	Cys	Gly	Thr	Val	Gly	Leu	Leu	Leu	Glu	His	Ser	Phe		50	55	60	
Glu	Ile	Asp	Asp	Ser	Ala	Asn	Phe	Arg	Lys	Arg	Gly	Ser	Leu	Leu		65	70	75	
Trp	Asn	Gln	Gln	Asp	Gly	Thr	Leu	Ser	Leu	Ser	Gln	Arg	Gln	Leu		80	85	90	
Ser	Glu	Glu	Glu	Arg	Gly	Arg	Leu	Arg	Asp	Val	Ala	Ala	Leu	Asn		95	100	105	
Gly	Leu	Tyr	Arg	Val	Arg	Ile	Pro	Arg	Arg	Pro	Gly	Ala	Leu	Asp		110	115	120	
Gly	Leu	Glu	Ala	Gly	Gly	Tyr	Val	Ser	Ser	Phe	Val	Pro	Ala	Cys		125	130	135	
Ser	Leu	Val	Glu	Ser	His	Leu	Ser	Asp	Gln	Leu	Thr	Leu	His	Val		140	145	150	
Asp	Val	Ala	Gly	Asn	Val	Val	Gly	Val	Ser	Val	Val	Thr	His	Pro		155	160	165	

Gly	Gly	Cys	Arg	Gly	His	Glu	Val	Glu	Asp	Val	Asp	Leu	Glu	Leu
				170					175					180
Phe	Asn	Thr	Ser	Val	Gln	Leu	Gln	Pro	Pro	Thr	Thr	Ala	Pro	Gly
				185					190					195
Pro	Glu	Thr	Ala	Ala	Phe	Ile	Glu	Arg	Leu	Glu	Met	Glu	Gln	Ala
				200					205					210
Gln	Lys	Ala	Lys	Asn	Pro	Gln	Glu	Gln	Lys	Ser	Phe	Phe	Ala	Lys
				215					220					225
Tyr	Trp	Met	Tyr	Ile	Ile	Pro	Val	Val	Leu	Phe	Leu	Met	Met	Ser
				230					235					240
Gly	Ala	Pro	Asp	Thr	Gly	Gly	Gln	Gly	Gly	Gly	Gly	Gly	Gly	Gly
				245					250					255
Gly	Gly	Gly	Gly	Ser	Gly	Leu	Cys	Cys	Val	Pro	Pro	Ser	Leu	
				260					265					

<210> 533
 <211> 496
 <212> DNA
 <213> Homo Sapien

<220>
 <221> unsure
 <222> 396
 <223> unknown base

<400> 533
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 ctgaacaaga tgggtcaagca agtgactggg aaaatgccca tcctctccta 150
 ctggccctac ggctgtcact gcggactagg tggcagaggc caacccaaag 200
 atgccacgga ctggtgctgc cagacccatg actgctgcta tgaccacctg 250
 aagaccacagg ggtgcggcat ctacaaggac aacaacaaaa gcagcataca 300
 ttgtatggat ttatctcaac gctattgttt aatggctgtg tttaatgtga 350
 tctatctgga aaatgaggac tccgaataaa aagctattac tawttnaaaa 400
 aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 450
 aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaa 496

<210> 534
 <211> 116
 <212> PRT
 <213> Homo Sapien

<400> 534

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Ile Pro Ile Gln Gly Gly Ile Leu Asn Leu Asn Lys Met Val Lys
20 25 30
Gln Val Thr Gly Lys Met Pro Ile Leu Ser Tyr Trp Pro Tyr Gly
35 40 45
Cys His Cys Gly Leu Gly Gly Arg Gly Gln Pro Lys Asp Ala Thr
50 55 60
Asp Trp Cys Cys Gln Thr His Asp Cys Cys Tyr Asp His Leu Lys
65 70 75
Thr Gln Gly Cys Gly Ile Tyr Lys Asp Asn Asn Lys Ser Ser Ile
80 85 90
His Cys Met Asp Leu Ser Gln Arg Tyr Cys Leu Met Ala Val Phe
95 100 105
Asn Val Ile Tyr Leu Glu Asn Glu Asp Ser Glu
110 115

<210> 535
<211> 2379
<212> DNA
<213> Homo Sapien

<400> 535
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atacagatgt ggcagctcag gtagcccca attgcctgga agaatacatc 150
atgttttttcg ataagaagaa attgtaggat ccagtttttt ttttaaccgc 200
ccccctccca ccccccaaaa aaactgtaaa gatgcaaaaa cgtaatatcc 250
atgaagatcc tattacctag gaagattttg atgttttgct gcgaaatgcgg 300
tgttgggatt tatttgttct tggagtgttc tgcgtggctg gcaaagaata 350
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tgtcagcgag ccctgactca ctacagtgc gctgacagg gctgtcatgc 450
aactggcccc taagccaaag caaaagacct aaggacgacc tttgaacaat 500
acaaaggatg ggtttcaatg taattaggct actgagcggg tcagctgtag 550
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 caatattgac gaaaatgctt ttaatggaat acgcagactc aaagagctga 850
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 ggtctaactc cctgagaacc atccctgtgc gaatattcca agactgccgc 1050
 aacctggaac ttttggacct gggatataac cggatccgaa gtttagccag 1100
 gaatgtcttt gctggcatga tcagactcaa agaacttcac ctggagcaca 1150
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 cgctcaacc tggattccaa caagctcaca tttattggtc aagagatttt 1400
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<210> 536

<211> 513

<212> PRT

<213> Homo Sapien

<400> 536

Met	Gly	Phe	Asn	Val	Ile	Arg	Leu	Leu	Ser	Gly	Ser	Ala	Val	Ala	1	5	10	15
Leu	Val	Ile	Ala	Pro	Thr	Val	Leu	Leu	Thr	Met	Leu	Ser	Ser	Ala	20	25	30	
Glu	Arg	Gly	Cys	Pro	Lys	Gly	Cys	Arg	Cys	Glu	Gly	Lys	Met	Val	35	40	45	
Tyr	Cys	Glu	Ser	Gln	Lys	Leu	Gln	Glu	Ile	Pro	Ser	Ser	Ile	Ser	50	55	60	
Ala	Gly	Cys	Leu	Gly	Leu	Ser	Leu	Arg	Tyr	Asn	Ser	Leu	Gln	Lys	65	70	75	
Leu	Lys	Tyr	Asn	Gln	Phe	Lys	Gly	Leu	Asn	Gln	Leu	Thr	Trp	Leu	80	85	90	
Tyr	Leu	Asp	His	Asn	His	Ile	Ser	Asn	Ile	Asp	Glu	Asn	Ala	Phe	95	100	105	
Asn	Gly	Ile	Arg	Arg	Leu	Lys	Glu	Leu	Ile	Leu	Ser	Ser	Asn	Arg	110	115	120	
Ile	Ser	Tyr	Phe	Leu	Asn	Asn	Thr	Phe	Arg	Pro	Val	Thr	Asn	Leu	125	130	135	
Arg	Asn	Leu	Asp	Leu	Ser	Tyr	Asn	Gln	Leu	His	Ser	Leu	Gly	Ser	140	145	150	
Glu	Gln	Phe	Arg	Gly	Leu	Arg	Lys	Leu	Leu	Ser	Leu	His	Leu	Arg	155	160	165	
Ser	Asn	Ser	Leu	Arg	Thr	Ile	Pro	Val	Arg	Ile	Phe	Gln	Asp	Cys	170	175	180	
Arg	Asn	Leu	Glu	Leu	Leu	Asp	Leu	Gly	Tyr	Asn	Arg	Ile	Arg	Ser	185	190	195	
Leu	Ala	Arg	Asn	Val	Phe	Ala	Gly	Met	Ile	Arg	Leu	Lys	Glu	Leu	200	205	210	

Cys Glu Val

<210> 537
 <211> 3554
 <212> DNA
 <213> Homo Sapien

<400> 537
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 tcaaatccag caatcgaacc ccagtggtag aggaatttga aagtgtggaa 200
 ctgtcttgca tcattacgga ttgcagaca agtgaccca ggatcgagtg 250
 gaagaaaatt caagatgaac aaaccacata tgtgtttttt gacaacaaaa 300
 ttcagggaga cttggcgggt cgtgcagaaa tactggggaa gacatccctg 350
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 cgttgctcga aatgaccgca aggaaattga tgagattgtg atcgagttaa 450
 ctgtgcaagt gaagccagtg acccctgtct gtagagtgcc gaaggctgta 500
 ccagtaggca agatggcaac actgcactgc caggagagtg agggccaccc 550
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 acaggcactt tgggtgttcac tgctgttcac aaggacgact ctgggcagta 700
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 <211> 310
 <212> PRT
 <213> Homo Sapien

<400> 538
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 35 40 45
 Phe Glu Ser Val Glu Leu Ser Cys Ile Ile Thr Asp Ser Gln Thr
 50 55 60
 Ser Asp Pro Arg Ile Glu Trp Lys Lys Ile Gln Asp Glu Gln Thr
 65 70 75

Thr	Tyr	Val	Phe	Phe	Asp	Asn	Lys	Ile	Gln	Gly	Asp	Leu	Ala	Gly	80	85	90
Arg	Ala	Glu	Ile	Leu	Gly	Lys	Thr	Ser	Leu	Lys	Ile	Trp	Asn	Val	95	100	105
Thr	Arg	Arg	Asp	Ser	Ala	Leu	Tyr	Arg	Cys	Glu	Val	Val	Ala	Arg	110	115	120
Asn	Asp	Arg	Lys	Glu	Ile	Asp	Glu	Ile	Val	Ile	Glu	Leu	Thr	Val	125	130	135
Gln	Val	Lys	Pro	Val	Thr	Pro	Val	Cys	Arg	Val	Pro	Lys	Ala	Val	140	145	150
Pro	Val	Gly	Lys	Met	Ala	Thr	Leu	His	Cys	Gln	Glu	Ser	Glu	Gly	155	160	165
His	Pro	Arg	Pro	His	Tyr	Ser	Trp	Tyr	Arg	Asn	Asp	Val	Pro	Leu	170	175	180
Pro	Thr	Asp	Ser	Arg	Ala	Asn	Pro	Arg	Phe	Arg	Asn	Ser	Ser	Phe	185	190	195
His	Leu	Asn	Ser	Glu	Thr	Gly	Thr	Leu	Val	Phe	Thr	Ala	Val	His	200	205	210
Lys	Asp	Asp	Ser	Gly	Gln	Tyr	Tyr	Cys	Ile	Ala	Ser	Asn	Asp	Ala	215	220	225
Gly	Ser	Ala	Arg	Cys	Glu	Glu	Gln	Glu	Met	Glu	Val	Tyr	Asp	Leu	230	235	240
Asn	Ile	Gly	Gly	Ile	Ile	Gly	Gly	Val	Leu	Val	Val	Leu	Ala	Val	245	250	255
Leu	Ala	Leu	Ile	Thr	Leu	Gly	Ile	Cys	Cys	Ala	Tyr	Arg	Arg	Gly	260	265	270
Tyr	Phe	Ile	Asn	Asn	Lys	Gln	Asp	Gly	Glu	Ser	Tyr	Lys	Asn	Pro	275	280	285
Gly	Lys	Pro	Asp	Gly	Val	Asn	Tyr	Ile	Arg	Thr	Asp	Glu	Glu	Gly	290	295	300
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<211> 2570

<212> DNA

<213> Homo Sapien

<400> 539

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<210> 540
<211> 273
<212> PRT
<213> Homo Sapien

<400> 540
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Cys Phe Ala Asp Phe Lys His Pro Cys Tyr Lys Met Ala Tyr Phe
35 40 45
His Glu Leu Ser Ser Arg Val Ser Phe Gln Glu Ala Arg Leu Ala

50					55					60				
Cys	Glu	Ser	Glu	Gly	Gly	Val	Leu	Leu	Ser	Leu	Glu	Asn	Glu	Ala
				65					70					75
Glu	Gln	Lys	Leu	Ile	Glu	Ser	Met	Leu	Gln	Asn	Leu	Thr	Lys	Pro
				80					85					90
Gly	Thr	Gly	Ile	Ser	Asp	Gly	Asp	Phe	Trp	Ile	Gly	Leu	Trp	Arg
				95					100					105
Asn	Gly	Asp	Gly	Gln	Thr	Ser	Gly	Ala	Cys	Pro	Asp	Leu	Tyr	Gln
				110					115					120
Trp	Ser	Asp	Gly	Ser	Asn	Ser	Gln	Tyr	Arg	Asn	Trp	Tyr	Thr	Asp
				125					130					135
Glu	Pro	Ser	Cys	Gly	Ser	Glu	Lys	Cys	Val	Val	Met	Tyr	His	Gln
				140					145					150
Pro	Thr	Ala	Asn	Pro	Gly	Leu	Gly	Gly	Pro	Tyr	Leu	Tyr	Gln	Trp
				155					160					165
Asn	Asp	Asp	Arg	Cys	Asn	Met	Lys	His	Asn	Tyr	Ile	Cys	Lys	Tyr
				170					175					180
Glu	Pro	Glu	Ile	Asn	Pro	Thr	Ala	Pro	Val	Glu	Lys	Pro	Tyr	Leu
				185					190					195
Thr	Asn	Gln	Pro	Gly	Asp	Thr	His	Gln	Asn	Val	Val	Val	Thr	Glu
				200					205					210
Ala	Gly	Ile	Ile	Pro	Asn	Leu	Ile	Tyr	Val	Val	Ile	Pro	Thr	Ile
				215					220					225
Pro	Leu	Leu	Leu	Leu	Ile	Leu	Val	Ala	Phe	Gly	Thr	Cys	Cys	Phe
				230					235					240
Gln	Met	Leu	His	Lys	Ser	Lys	Gly	Arg	Thr	Lys	Thr	Ser	Pro	Asn
				245					250					255
Gln	Ser	Thr	Leu	Trp	Ile	Ser	Lys	Ser	Thr	Arg	Lys	Glu	Ser	Gly
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<210> 541
 <211> 3824
 <212> DNA
 <213> Homo Sapien

<400> 541
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<210> 542
 <211> 571
 <212> PRT
 <213> Homo Sapien

<400> 542
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 Val Ala Gln Pro Glu Val Asp Thr Thr Leu Gly Arg Val Arg Gly
 35 40 45
 Arg Gln Val Gly Val Lys Gly Thr Asp Arg Leu Val Asn Val Phe
 50 55 60
 Leu Gly Ile Pro Phe Ala Gln Pro Pro Leu Gly Pro Asp Arg Phe
 65 70 75
 Ser Ala Pro His Pro Ala Gln Pro Trp Glu Gly Val Arg Asp Ala
 80 85 90
 Ser Thr Ala Pro Pro Met Cys Leu Gln Asp Val Glu Ser Met Asn
 95 100 105

Ser Ser Arg Phe Val Leu Asn Gly Lys Gln Gln Ile Phe Ser Val	110	115	120
Ser Glu Asp Cys Leu Val Leu Asn Val Tyr Ser Pro Ala Glu Val	125	130	135
Pro Ala Gly Ser Gly Arg Pro Val Met Val Trp Val His Gly Gly	140	145	150
Ala Leu Ile Thr Gly Ala Ala Thr Ser Tyr Asp Gly Ser Ala Leu	155	160	165
Ala Ala Tyr Gly Asp Val Val Val Val Thr Val Gln Tyr Arg Leu	170	175	180
Gly Val Leu Gly Phe Phe Ser Thr Gly Asp Glu His Ala Pro Gly	185	190	195
Asn Gln Gly Phe Leu Asp Val Val Ala Ala Leu Arg Trp Val Gln	200	205	210
Glu Asn Ile Ala Pro Phe Gly Gly Asp Leu Asn Cys Val Thr Val	215	220	225
Phe Gly Gly Ser Ala Gly Gly Ser Ile Ile Ser Gly Leu Val Leu	230	235	240
Ser Pro Val Ala Ala Gly Leu Phe His Arg Ala Ile Thr Gln Ser	245	250	255
Gly Val Ile Thr Thr Pro Gly Ile Ile Asp Ser His Pro Trp Pro	260	265	270
Leu Ala Gln Lys Ile Ala Asn Thr Leu Ala Cys Ser Ser Ser Ser	275	280	285
Pro Ala Glu Met Val Gln Cys Leu Gln Gln Lys Glu Gly Glu Glu	290	295	300
Leu Val Leu Ser Lys Lys Leu Lys Asn Thr Ile Tyr Pro Leu Thr	305	310	315
Val Asp Gly Thr Val Phe Pro Lys Ser Pro Lys Glu Leu Leu Lys	320	325	330
Glu Lys Pro Phe His Ser Val Pro Phe Leu Met Gly Val Asn Asn	335	340	345
His Glu Phe Ser Trp Leu Ile Pro Arg Gly Trp Gly Leu Leu Asp	350	355	360
Thr Met Glu Gln Met Ser Arg Glu Asp Met Leu Ala Ile Ser Thr	365	370	375
Pro Val Leu Thr Ser Leu Asp Val Pro Pro Glu Met Met Pro Thr	380	385	390
Val Ile Asp Glu Tyr Leu Gly Ser Asn Ser Asp Ala Gln Ala Lys			

	395		400		405
Cys Gln Ala Phe	Gln Glu Phe Met Gly	Asp Val Phe Ile Asn Val			
	410	415			420
Pro Thr Val Ser	Phe Ser Arg Tyr Leu	Arg Asp Ser Gly Ser Pro			
	425	430			435
Val Phe Phe Tyr	Glu Phe Gln His Arg	Pro Ser Ser Phe Ala Lys			
	440	445			450
Ile Lys Pro Ala	Trp Val Lys Ala Asp	His Gly Ala Glu Gly Ala			
	455	460			465
Phe Val Phe Gly	Gly Pro Phe Leu Met	Asp Glu Ser Ser Arg Leu			
	470	475			480
Ala Phe Pro Glu	Ala Thr Glu Glu Glu	Lys Gln Leu Ser Leu Thr			
	485	490			495
Met Met Ala Gln	Trp Thr His Phe Ala	Arg Thr Gly Asp Pro Asn			
	500	505			510
Ser Lys Ala Leu	Pro Pro Trp Pro Gln	Phe Asn Gln Ala Glu Gln			
	515	520			525
Tyr Leu Glu Ile	Asn Pro Val Pro Arg	Ala Gly Gln Lys Phe Arg			
	530	535			540
Glu Ala Trp Met	Gln Phe Trp Ser Glu	Thr Leu Pro Ser Lys Ile			
	545	550			555
Gln Gln Trp His	Gln Lys Gln Lys Asn	Arg Lys Ala Gln Glu Asp			
	560	565			570
Leu					

<210> 543
 <211> 3721
 <212> DNA
 <213> Homo Sapien

<400> 543
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 aaaaaaaaaa aaaaaaaaaa a 3721

<210> 544
 <211> 888
 <212> PRT
 <213> Homo Sapien

<400> 544
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 20 25 30
 Pro Pro Pro Leu Ser Val Ala Pro Arg Asp Tyr Leu Asn His Tyr
 35 40 45
 Pro Val Phe Val Gly Ser Gly Pro Gly Arg Leu Thr Pro Ala Glu
 50 55 60
 Gly Ala Asp Asp Leu Asn Ile Gln Arg Val Leu Arg Val Asn Arg
 65 70 75
 Thr Leu Phe Ile Gly Asp Arg Asp Asn Leu Tyr Arg Val Glu Leu
 80 85 90
 Glu Pro Pro Thr Ser Thr Glu Leu Arg Tyr Gln Arg Lys Leu Thr
 95 100 105
 Trp Arg Ser Asn Pro Ser Asp Ile Asn Val Cys Arg Met Lys Gly
 110 115 120
 Lys Gln Glu Gly Glu Cys Arg Asn Phe Val Lys Val Leu Leu Leu
 125 130 135
 Arg Asp Glu Ser Thr Leu Phe Val Cys Gly Ser Asn Ala Phe Asn
 140 145 150
 Pro Val Cys Ala Asn Tyr Ser Ile Asp Thr Leu Gln Pro Val Gly
 155 160 165

Asp	Asn	Ile	Ser	Gly	Met	Ala	Arg	Cys	Pro	Tyr	Asp	Pro	Lys	His	170	175	180
Ala	Asn	Val	Ala	Leu	Phe	Ser	Asp	Gly	Met	Leu	Phe	Thr	Ala	Thr	185	190	195
Val	Thr	Asp	Phe	Leu	Ala	Ile	Asp	Ala	Val	Ile	Tyr	Arg	Ser	Leu	200	205	210
Gly	Asp	Arg	Pro	Thr	Leu	Arg	Thr	Val	Lys	His	Asp	Ser	Lys	Trp	215	220	225
Phe	Lys	Glu	Pro	Tyr	Phe	Val	His	Ala	Val	Glu	Trp	Gly	Ser	His	230	235	240
Val	Tyr	Phe	Phe	Phe	Arg	Glu	Ile	Ala	Met	Glu	Phe	Asn	Tyr	Leu	245	250	255
Glu	Lys	Val	Val	Val	Ser	Arg	Val	Ala	Arg	Val	Cys	Lys	Asn	Asp	260	265	270
Val	Gly	Gly	Ser	Pro	Arg	Val	Leu	Glu	Lys	Gln	Trp	Thr	Ser	Phe	275	280	285
Leu	Lys	Ala	Arg	Leu	Asn	Cys	Ser	Val	Pro	Gly	Asp	Ser	His	Phe	290	295	300
Tyr	Phe	Asn	Val	Leu	Gln	Ala	Val	Thr	Gly	Val	Val	Ser	Leu	Gly	305	310	315
Gly	Arg	Pro	Val	Val	Leu	Ala	Val	Phe	Ser	Thr	Pro	Ser	Asn	Ser	320	325	330
Ile	Pro	Gly	Ser	Ala	Val	Cys	Ala	Phe	Asp	Leu	Thr	Gln	Val	Ala	335	340	345
Ala	Val	Phe	Glu	Gly	Arg	Phe	Arg	Glu	Gln	Lys	Ser	Pro	Glu	Ser	350	355	360
Ile	Trp	Thr	Pro	Val	Pro	Glu	Asp	Gln	Val	Pro	Arg	Pro	Arg	Pro	365	370	375
Gly	Cys	Cys	Ala	Ala	Pro	Gly	Met	Gln	Tyr	Asn	Ala	Ser	Ser	Ala	380	385	390
Leu	Pro	Asp	Asp	Ile	Leu	Asn	Phe	Val	Lys	Thr	His	Pro	Leu	Met	395	400	405
Asp	Glu	Ala	Val	Pro	Ser	Leu	Gly	His	Ala	Pro	Trp	Ile	Leu	Arg	410	415	420
Thr	Leu	Met	Arg	His	Gln	Leu	Thr	Arg	Val	Ala	Val	Asp	Val	Gly	425	430	435
Ala	Gly	Pro	Trp	Gly	Asn	Gln	Thr	Val	Val	Phe	Leu	Gly	Ser	Glu	440	445	450
Ala	Gly	Thr	Val	Leu	Lys	Phe	Leu	Val	Arg	Pro	Asn	Ala	Ser	Thr			

Leu Leu Leu Ala Pro Ala Arg Ala Pro Glu Gln Pro Pro Ala Pro
 755 760 765
 Gly Glu Pro Thr Pro Asp Gly Arg Leu Tyr Ala Ala Arg Pro Gly
 770 775 780
 Arg Ala Ser His Gly Asp Phe Pro Leu Thr Pro His Ala Ser Pro
 785 790 795
 Asp Arg Arg Arg Val Val Ser Ala Pro Thr Gly Pro Leu Asp Pro
 800 805 810
 Ala Ser Ala Ala Asp Gly Leu Pro Arg Pro Trp Ser Pro Pro Pro
 815 820 825
 Thr Gly Ser Leu Arg Arg Pro Leu Gly Pro His Ala Pro Pro Ala
 830 835 840
 Ala Thr Leu Arg Arg Thr His Thr Phe Asn Ser Gly Glu Ala Arg
 845 850 855
 Pro Gly Asp Arg His Arg Gly Cys His Ala Arg Pro Gly Thr Asp
 860 865 870
 Leu Ala His Leu Leu Pro Tyr Gly Gly Ala Asp Arg Thr Ala Pro
 875 880 885
 Pro Val Pro

<210> 545
 <211> 1571
 <212> DNA
 <213> Homo Sapien

<400> 545
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 atgtcattct ctatctattc actgcaagtg cctgctgttc caggccttac 200
 ctgctgggca ctaacggcgg agccaggatg gggacagaat aaaggagcca 250
 cgacctgtgc caccaactcg cactcagact ctgaactcag acctgaaatc 300
 ttctcttcac gggaggcttg gcagtttttc ttactcctgt ggtctccaga 350
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 ctgcgttttta tctcctatgg actccttcca ctggactgaa gacactcaat 450
 ttgggaagct gtgtgatcgc cacaaacctt caggaaatac gaaatggatt 500
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gaatcttaag gaggactgag tctttgcaag acacaaagcc tgcgaatcga 600
 tgctgcctcc tgcgccattt gctaagactc tatctggaca gggatatttaa 650
 aaactaccag acccctgacc attatactct ccggaagatc agcagcctcg 700
 ccaattcctt tcttaccatc aagaaggacc tccggctctc tcatgcccac 750
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 gagtcacttt gaaaagctgg aacctcaggc agcagttgtg aaggctttgg 850
 gggaaactaga cattcttctg caatggatgg aggagacaga ataggaggaa 900
 agtgaatgctg ctgctaagaa tattcgaggt caagagctcc agtcttcaat 950
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 cttgtgctgg tcacagtgtg tcttatttat gcattacttg cttccttgca 1050
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<210> 546

<211> 261

<212> PRT

<213> Homo Sapien

<400> 546

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			20					25					30	

Thr	Cys	Trp	Ala	Leu	Thr	Ala	Glu	Pro	Gly	Trp	Gly	Gln	Asn	Lys
			35					40					45	

Gly	Ala	Thr	Thr	Cys	Ala	Thr	Asn	Ser	His	Ser	Asp	Ser	Glu	Leu
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

	50		55		60									
Arg	Pro	Glu	Ile	Phe	Ser	Ser	Arg	Glu	Ala	Trp	Gln	Phe	Phe	Leu
	65								70					75
Leu	Leu	Trp	Ser	Pro	Asp	Phe	Arg	Pro	Lys	Met	Lys	Ala	Ser	Ser
				80					85					90
Leu	Ala	Phe	Ser	Leu	Leu	Ser	Ala	Ala	Phe	Tyr	Leu	Leu	Trp	Thr
				95					100					105
Pro	Ser	Thr	Gly	Leu	Lys	Thr	Leu	Asn	Leu	Gly	Ser	Cys	Val	Ile
				110					115					120
Ala	Thr	Asn	Leu	Gln	Glu	Ile	Arg	Asn	Gly	Phe	Ser	Glu	Ile	Arg
				125					130					135
Gly	Ser	Val	Gln	Ala	Lys	Asp	Gly	Asn	Ile	Asp	Ile	Arg	Ile	Leu
				140					145					150
Arg	Arg	Thr	Glu	Ser	Leu	Gln	Asp	Thr	Lys	Pro	Ala	Asn	Arg	Cys
				155					160					165
Cys	Leu	Leu	Arg	His	Leu	Leu	Arg	Leu	Tyr	Leu	Asp	Arg	Val	Phe
				170					175					180
Lys	Asn	Tyr	Gln	Thr	Pro	Asp	His	Tyr	Thr	Leu	Arg	Lys	Ile	Ser
				185					190					195
Ser	Leu	Ala	Asn	Ser	Phe	Leu	Thr	Ile	Lys	Lys	Asp	Leu	Arg	Leu
				200					205					210
Ser	His	Ala	His	Met	Thr	Cys	His	Cys	Gly	Glu	Glu	Ala	Met	Lys
				215					220					225
Lys	Tyr	Ser	Gln	Ile	Leu	Ser	His	Phe	Glu	Lys	Leu	Glu	Pro	Gln
				230					235					240
Ala	Ala	Val	Val	Lys	Ala	Leu	Gly	Glu	Leu	Asp	Ile	Leu	Leu	Gln
				245					250					255
Trp	Met	Glu	Glu	Thr	Glu									
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<210> 547
 <211> 2014
 <212> DNA
 <213> Homo Sapien

<400> 547
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 gccgggcggc aacctttgca gtcgcggttg ctgctgcgat cggccggcgg 200

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aagaagaatt tttttaagta ttaattccat ggacaatata aaatctgtgt 1900
gattgtttgc agtatgaaga cacattttcta cttatgcagt attctcatga 1950
ctgtacttta aagtacattt ttagaatttt ataataaaac cacctttatt 2000
ttaaaggaaa aaaa 2014

<210> 548
<211> 502
<212> PRT
<213> Homo Sapien

<400> 548
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Lys Ser Glu Ile Trp Gly Pro Gly Leu Lys Ala Asp Val Val Leu
35 40 45
Pro Ala Arg Tyr Phe Tyr Ile Gln Ala Val Asp Thr Ser Gly Asn
50 55 60
Lys Phe Thr Ser Ser Pro Gly Glu Lys Val Phe Gln Val Lys Val
65 70 75
Ser Ala Pro Glu Glu Gln Phe Thr Arg Val Gly Val Gln Val Leu
80 85 90
Asp Arg Lys Asp Gly Ser Phe Ile Val Arg Tyr Arg Met Tyr Ala
95 100 105
Ser Tyr Lys Asn Leu Lys Val Glu Ile Lys Phe Gln Gly Gln His
110 115 120
Val Ala Lys Ser Pro Tyr Ile Leu Lys Gly Pro Val Tyr His Glu
125 130 135
Asn Cys Asp Cys Pro Leu Gln Asp Ser Ala Ala Trp Leu Arg Glu
140 145 150
Met Asn Cys Pro Glu Thr Ile Ala Gln Ile Gln Arg Asp Leu Ala
155 160 165
His Phe Pro Ala Val Asp Pro Glu Lys Ile Ala Val Glu Ile Pro
170 175 180

Lys	Arg	Phe	Gly	Gln	Arg	Gln	Ser	Leu	Cys	His	Tyr	Thr	Leu	Lys	185	190	195
Asp	Asn	Lys	Val	Tyr	Ile	Lys	Thr	His	Gly	Glu	His	Val	Gly	Phe	200	205	210
Arg	Ile	Phe	Met	Asp	Ala	Ile	Leu	Leu	Ser	Leu	Thr	Arg	Lys	Val	215	220	225
Lys	Met	Pro	Asp	Val	Glu	Leu	Phe	Val	Asn	Leu	Gly	Asp	Trp	Pro	230	235	240
Leu	Glu	Lys	Lys	Lys	Ser	Asn	Ser	Asn	Ile	His	Pro	Ile	Phe	Ser	245	250	255
Trp	Cys	Gly	Ser	Thr	Asp	Ser	Lys	Asp	Ile	Val	Met	Pro	Thr	Tyr	260	265	270
Asp	Leu	Thr	Asp	Ser	Val	Leu	Glu	Thr	Met	Gly	Arg	Val	Ser	Leu	275	280	285
Asp	Met	Met	Ser	Val	Gln	Ala	Asn	Thr	Gly	Pro	Pro	Trp	Glu	Ser	290	295	300
Lys	Asn	Ser	Thr	Ala	Val	Trp	Arg	Gly	Arg	Asp	Ser	Arg	Lys	Glu	305	310	315
Arg	Leu	Glu	Leu	Val	Lys	Leu	Ser	Arg	Lys	His	Pro	Glu	Leu	Ile	320	325	330
Asp	Ala	Ala	Phe	Thr	Asn	Phe	Phe	Phe	Phe	Lys	His	Asp	Glu	Asn	335	340	345
Leu	Tyr	Gly	Pro	Ile	Val	Lys	His	Ile	Ser	Phe	Phe	Asp	Phe	Phe	350	355	360
Lys	His	Lys	Tyr	Gln	Ile	Asn	Ile	Asp	Gly	Thr	Val	Ala	Ala	Tyr	365	370	375
Arg	Leu	Pro	Tyr	Leu	Leu	Val	Gly	Asp	Ser	Val	Val	Leu	Lys	Gln	380	385	390
Asp	Ser	Ile	Tyr	Tyr	Glu	His	Phe	Tyr	Asn	Glu	Leu	Gln	Pro	Trp	395	400	405
Lys	His	Tyr	Ile	Pro	Val	Lys	Ser	Asn	Leu	Ser	Asp	Leu	Leu	Glu	410	415	420
Lys	Leu	Lys	Trp	Ala	Lys	Asp	His	Asp	Glu	Glu	Ala	Lys	Lys	Ile	425	430	435
Ala	Lys	Ala	Gly	Gln	Glu	Phe	Ala	Arg	Asn	Asn	Leu	Met	Gly	Asp	440	445	450
Asp	Ile	Phe	Cys	Tyr	Tyr	Phe	Lys	Leu	Phe	Gln	Glu	Tyr	Ala	Asn	455	460	465
Leu	Gln	Val	Ser	Glu	Pro	Gln	Ile	Arg	Glu	Gly	Met	Lys	Arg	Val			

	470		475		480
Glu Pro Gln Thr Glu Asp Asp Leu Phe Pro Cys Thr Cys His Arg					
	485		490		495
Lys Lys Thr Lys Asp Glu Leu					
	500				

<210> 549
 <211> 1088
 <212> DNA
 <213> Homo Sapien

<400> 549
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 ccggagcctc cgctgccagc gacatgttca aggtaattca gaggtccgtg 200
 gggccagcca gcctgagctt gctcaccttc aaagtctatg cagcaccaaa 250
 aaaggactca cctcccaaaa attccgtgaa ggttgatgag ctttactct 300
 actcagttcc tgaggggtcaa tcgaagtatg tggaggaggc aaggagccag 350
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 caggtcagtg gggagagatt atatgactgg ggtttacgag gatatatagt 700
 catagaagat ttgtggaagg agaactttca aaagccagga aatgtgaaga 750
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Thr	Trp	Cys	Gln	Glu	Thr	Tyr	Ser	Gln	Thr	Lys	Pro	Lys	Met	Gln
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Gly	Leu	Ile	Gly	Leu	Leu	Leu	Ala	Arg	Gly	Ser	Lys	Ile	Lys	Lys
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Tyr	Pro	Gln	Gln	Ala	Ile	Val	Phe	Ala	Gln	Val	Ser	Gly	Glu	Arg
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Trp	Lys	Glu	Asn	Phe	Gln	Lys	Pro	Gly	Asn	Val	Lys	Asn	Ser	Pro
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Gly	Thr	Lys												